

APPENDIX B

STATISTICAL TABLES

STATISTICAL TABLES

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**Appendix table 1-1. Highest level of education attained by persons age 18 and over,
by age, sex, and race/ethnicity: March 1997 [percentages]**

Highest level of education attained, sex, and race/ethnicity	Age									
	Total, 18 years old and over	18 and 19 years old	20 to 24 years old	25 to 29 years old	30 to 34 years old	35 to 39 years old	40 to 49 years old	50 to 59 years old	60 to 64 years old	65 years old and over
Total										
No high school diploma...	18.6	43.3	14.5	12.6	12.8	12.5	11.7	16.9	25.0	34.5
High school graduate...	33.4	30.8	31.3	30.2	32.8	35.1	33.0	35.2	37.0	34.3
Some college...	19.5	25.6	38.6	21.6	18.5	18.6	18.6	16.3	13.8	12.9
Associate's degree...	6.8	0.2	5.2	7.7	9.5	8.8	8.9	6.6	4.9	3.6
Bachelor's degree or higher...	21.7	0.1	10.3	27.8	26.4	24.9	27.7	25.0	19.2	14.8
Men										
No high school diploma...	19.0	48.3	16.0	14.2	14.0	13.6	12.4	17.3	23.9	34.2
High school graduate...	32.1	30.0	32.4	30.9	33.7	35.8	31.4	32.0	32.8	29.6
Some college...	19.3	21.5	38.1	21.7	17.5	17.7	18.6	16.0	14.4	13.3
Associate's degree...	6.1	0.2	4.9	6.9	8.7	7.5	8.0	5.7	4.6	2.9
Bachelor's degree or higher...	23.5	0.0	8.6	26.3	26.1	25.3	29.6	29.0	24.4	19.9
Women										
No high school diploma...	18.1	38.1	13.0	11.1	11.7	11.4	11.1	16.6	26.1	34.7
High school graduate...	34.7	31.7	30.2	29.5	32.0	34.4	34.6	38.2	40.7	37.7
Some college...	19.6	29.6	39.2	21.5	19.5	19.4	18.5	16.6	13.4	12.5
Associate's degree...	7.5	0.3	5.6	8.6	10.3	10.2	9.9	7.5	5.2	4.1
Bachelor's degree or higher...	20.1	0.3	12.0	29.3	26.6	24.6	25.9	21.1	14.6	11.1
White, non-Hispanic										
No high school diploma...	14.2	39.3	8.4	7.1	7.6	8.3	7.3	11.8	19.3	30.3
High school graduate...	34.4	32.2	30.7	29.5	33.6	35.9	33.3	36.5	39.6	36.4
Some college...	19.9	28.2	42.1	22.1	18.5	18.4	19.0	17.4	15.1	13.8
Associate's degree...	7.3	0.2	6.3	8.6	10.3	9.2	9.7	6.9	5.0	3.7
Bachelor's degree or higher...	24.2	0.2	12.4	32.6	30.1	28.1	30.6	27.3	21.0	15.8
Black, non-Hispanic										
No high school diploma...	25.2	48.5	18.1	13.1	15.6	14.7	18.6	29.7	42.9	55.8
High school graduate...	36.3	33.6	39.2	40.3	38.4	38.8	38.5	35.8	31.1	24.8
Some college...	20.8	18.0	34.7	26.6	23.1	24.2	20.2	14.0	11.0	8.3
Associate's degree...	5.9	0.0	2.6	5.8	9.4	8.6	7.4	6.4	4.5	2.7
Bachelor's degree or higher...	11.8	0.0	5.5	14.2	13.5	13.8	15.3	14.2	10.5	8.5
Hispanic										
No high school diploma...	45.2	58.0	39.6	38.2	39.4	39.3	41.6	52.2	61.7	69.6
High school graduate...	26.2	25.0	28.4	28.5	26.6	28.7	26.8	24.5	21.3	17.6
Some college...	15.1	16.4	25.8	16.5	15.8	14.9	14.5	9.8	6.4	5.3
Associate's degree...	4.7	0.5	3.0	5.8	6.1	6.2	5.5	4.8	2.8	1.7
Bachelor's degree or higher...	8.8	0.0	3.3	11.0	12.0	10.9	11.6	8.7	7.7	5.8

NOTE: Data are based on a sample survey of the civilian noninstitutional population. Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey. Data for this table were published in the U.S. Department of Education National Center for Education Statistics, *Digest of Education Statistics 1998*, Table 9, page 18.

Appendix table 1-2. Percentage of 25- to 29-year-olds who had completed high school, by race/ethnicity and sex: March 1971–98

Year	Total			White, non-Hispanic			Black, non-Hispanic			Hispanic		
	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women
1971	77.7	79.1	76.5	81.7	83.0	80.5	58.8	56.7	60.5	48.3	51.3	45.7
1972	79.8	80.5	79.2	83.4	84.1	82.7	64.1	61.7	66.0	47.6	47.1	47.9
1973	80.2	80.6	79.8	84.0	84.2	83.9	64.1	63.2	64.9	52.3	54.2	50.6
1974	81.9	83.1	80.8	85.5	86.0	85.0	68.4	71.5	65.8	54.1	55.9	52.5
1975	83.1	84.5	81.7	86.6	88.0	85.2	71.1	72.3	70.1	53.1	52.2	53.9
1976	84.7	86.0	83.5	87.7	89.0	86.4	74.0	72.8	74.9	58.1	57.6	58.4
1977	85.4	86.6	84.2	88.6	89.2	88.0	74.5	77.5	72.0	58.0	61.9	54.6
1978	85.3	86.0	84.6	88.5	88.8	88.2	77.4	78.7	76.3	56.5	58.5	54.6
1979	85.6	86.3	84.9	89.2	89.8	88.5	74.7	74.0	75.3	57.1	55.5	58.6
1980	85.4	85.4	85.5	89.2	89.1	89.2	76.7	74.8	78.3	57.9	57.0	58.8
1981	86.3	86.5	86.1	89.8	89.7	89.9	77.6	78.8	76.6	59.8	59.1	60.4
1982	86.2	86.3	86.1	89.1	89.1	89.1	81.0	80.4	81.5	61.0	60.6	61.2
1983	86.0	86.0	86.0	89.3	89.3	89.3	79.5	79.0	79.9	58.4	57.8	58.9
1984	85.9	85.6	86.3	89.4	89.4	89.4	79.1	75.9	81.7	58.6	56.7	60.1
1985	86.2	85.9	86.4	89.5	89.2	89.9	80.5	80.6	80.5	61.0	58.6	63.1
1986	86.1	85.9	86.4	89.6	88.7	90.4	83.5	86.4	81.0	59.1	58.2	60.0
1987	86.0	85.5	86.4	89.4	88.9	90.0	83.5	84.5	82.6	59.8	58.6	61.0
1988	85.9	84.7	87.1	89.7	88.4	90.9	80.9	80.9	80.9	62.3	59.9	64.8
1989	85.5	84.4	86.5	89.3	88.2	90.4	82.3	80.5	83.8	61.0	61.0	61.1
1990	85.7	84.4	87.0	90.1	88.6	91.6	81.8	81.4	82.0	58.2	56.6	59.9
1991	85.4	84.9	85.8	89.8	89.2	90.5	81.8	83.6	80.1	56.7	56.4	57.2
1992	86.3	86.1	86.5	90.6	90.3	91.1	80.9	82.7	79.3	60.9	61.1	60.6
1993	86.7	86.0	87.4	91.2	90.7	91.8	82.7	84.8	80.8	60.9	58.2	63.9
1994	86.1	84.5	87.6	91.1	90.0	92.3	84.1	82.8	85.3	60.3	58.0	63.0
1995	86.9	86.3	87.4	92.5	92.0	93.0	86.8	88.4	85.3	57.2	55.7	58.7
1996	87.3	86.5	88.1	92.6	92.0	93.1	86.0	87.9	84.5	61.1	59.7	62.9
1997	87.4	85.8	88.9	92.9	91.7	94.0	86.9	85.8	87.8	61.8	59.2	64.8
1998	88.1	86.6	89.6	93.6	92.5	94.6	88.2	88.4	88.1	62.8	59.9	66.3

NOTE: The Current Population Survey (CPS) questions used to obtain educational attainment were changed in 1992. For 1992 to 1998, high school completers includes those who have a high school diploma or an equivalency certificate. For the years 1971 to 1991, high school completers are people who have completed 4 years of high school or more (but may not have a diploma or equivalency certificate). Included in total but not shown separately are other racial/ethnic groups.

SOURCE: U.S. Department of Commerce, Bureau of the Census, March Current Population Surveys, various years.

Appendix table 1-3. Percentage distribution of 1988 8th graders, by high school completion status as of Spring 1994, disability status and type

Disability status and type	High school diploma	GED or equivalent certificate	Enrolled in high school or working toward GED	Dropped out
Total...	82.0	6.0	5.2	6.8
Does not have a disability...	83.8	5.9	4.3	6.0
Has as a disability...	72.4	5.7	10.6	10.3
Visual impairment...	77.3	4.9	15.8	2.0
Hearing impairment or deaf...	75.5	9.8	10.3	4.4
Speech impairment...	87.0	2.3	6.0	4.7
Orthopedic impairment...	75.0	1.7	5.9	17.4
Learning disability...	71.4	6.8	9.6	12.3
Other disability or impairment ¹ ...	67.0	7.2	14.3	11.5

¹ Any other disability, including health problems, emotional problems, mental retardation, or other physical disabilities

NOTE: Percentages may not sum to 100 due to rounding. GED refers to passing the General Education Development exam.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988, Third Follow-up survey, 1994 (NELS: 88/94), Data Analysis System (in U.S. Department of Education, National Center for Education Statistics, 1999. *Students with Disabilities in Postsecondary Education: A Profile of Preparation, Participation, and Outcomes*, NCES 1999-187, by Laura Horn and Jennifer Berkold).

**Appendix table 1-4. Percentage of 25- to 29-year-old high school completers with some college,
by race/ethnicity and sex: March 1971–98**

March	Total			White, non-Hispanic			Black, non-Hispanic			Hispanic		
	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women
1971	43.6	48.7	38.4	44.9	50.2	39.5	30.9	29.0	32.2	30.6	38.3	22.8
1972	45.1	50.7	39.5	46.3	52.3	40.2	33.3	31.7	34.6	32.1	37.2	28.3
1973	45.3	51.4	39.4	46.6	53.0	40.2	33.5	33.5	33.5	31.6	39.4	24.5
1974	48.9	53.8	44.1	50.4	55.6	45.2	35.4	36.9	34.1	39.2	44.1	34.5
1975	50.1	56.0	44.1	51.2	57.3	44.9	38.7	41.0	36.8	41.1	50.4	32.6
1976	52.1	58.2	46.0	53.8	60.1	47.4	37.2	40.5	34.7	36.3	42.3	31.2
1977	53.2	58.0	48.5	54.8	59.9	49.7	41.7	44.2	39.6	41.1	42.6	39.5
1978	54.4	59.3	49.6	55.9	61.4	50.3	44.9	45.2	44.4	43.6	47.2	40.1
1979	54.1	57.7	50.6	55.7	59.4	51.9	41.7	40.7	42.5	44.0	50.7	38.0
1980	52.3	55.8	49.0	53.8	57.3	50.3	42.3	43.6	41.3	39.9	45.5	34.7
1981	50.1	52.7	47.5	51.2	54.1	48.3	42.5	43.0	42.2	39.6	41.7	37.7
1982	49.9	51.5	48.3	50.7	52.2	49.1	45.8	47.4	44.6	39.6	40.6	38.7
1983	50.6	52.1	49.0	51.6	53.4	49.7	41.6	42.0	41.2	42.9	41.1	44.6
1984	50.1	50.9	49.3	51.0	51.7	50.3	41.6	41.6	41.7	45.6	47.5	44.0
1985	50.8	51.5	50.1	51.8	52.5	51.2	42.7	42.4	42.9	44.2	45.9	42.9
1986	51.0	51.4	50.8	52.3	52.8	51.8	43.4	41.5	45.2	42.9	42.8	43.0
1987	50.7	50.4	51.0	51.4	51.5	51.4	43.0	38.4	47.0	44.6	46.3	43.1
1988	50.8	51.6	50.1	51.8	52.4	51.2	41.2	42.9	39.7	44.9	44.3	45.6
1989	51.3	52.0	50.5	52.8	53.4	52.2	42.1	42.2	41.9	44.3	44.8	43.9
1990	52.0	51.8	52.1	53.6	53.4	53.8	44.1	43.0	45.0	40.1	40.4	39.8
1991	53.1	52.3	53.8	54.9	54.7	55.1	43.2	38.3	47.7	42.2	40.9	43.4
1992	56.7	56.0	57.4	58.8	58.3	59.2	44.7	42.3	46.9	46.8	44.5	49.6
1993	58.9	57.6	60.1	61.0	60.3	61.6	48.4	43.6	52.5	48.8	46.1	51.9
1994	60.5	58.9	62.0	62.7	61.0	64.3	49.6	48.7	50.3	51.5	48.3	55.0
1995	62.2	60.6	63.9	64.6	62.6	66.7	52.0	51.2	52.5	50.3	48.0	52.7
1996	64.7	63.1	66.3	67.0	65.5	68.4	55.9	54.5	57.1	50.9	47.0	55.6
1997	65.4	64.0	66.8	68.2	66.9	69.5	53.7	50.2	56.5	53.9	51.9	56.1
1998	65.6	63.0	68.1	68.5	66.2	70.8	56.6	52.9	59.7	51.7	48.9	54.7

NOTE: The Current Population Survey (CPS) questions used to obtain educational attainment were changed in 1992. Prior to 1992, "some college" includes those who had completed at least one year of college. From 1992 to 1998, "some college" includes those with an associate degree, vocational certificate, or baccalaureate degree. Included in total but not shown separately are other racial/ethnic groups.

SOURCE: U.S. Department of Commerce, Bureau of the Census, March Current Population Survey. In U.S. Department of Education, National Center for Education Statistics, *The Condition of Education 1999* (NCES 1999-022), Table 59-2.

**Appendix table 1-5. Total and full-time undergraduate enrollment at all institutions,
by sex and race/ethnicity: fall 1990–96**

	1990	1991	1992	1993	1994	1995	1996
Total...	12,110,847	12,595,335	12,693,778	12,482,813	12,417,701	12,399,826	12,424,570
Temporary residents...	220,000	235,205	258,661	269,139	270,374	268,544	274,776
White, non-Hispanic...	9,273,439	9,508,527	9,388,226	9,101,085	8,916,770	8,806,202	8,731,457
Asian/Pacific Islander...	506,837	565,166	620,463	642,893	683,508	700,828	721,773
Black, non-Hispanic...	1,148,979	1,231,252	1,282,732	1,292,621	1,319,684	1,336,052	1,354,910
Hispanic...	866,096	949,346	1,032,817	1,064,348	1,109,931	1,167,472	1,218,711
American Indian/Alaskan Native...	95,496	105,839	110,879	112,727	117,434	120,728	122,943
Women...	6,672,254	6,962,645	7,049,665	6,935,687	6,933,359	6,932,456	6,948,950
Temporary residents...	93,294	101,575	115,021	122,173	123,336	124,365	129,203
White, non-Hispanic...	5,088,662	5,235,217	5,192,500	5,033,796	4,953,370	4,887,860	4,840,551
Asian/Pacific Islander...	249,219	280,493	311,899	324,604	347,548	358,744	371,033
Black, non-Hispanic...	700,590	752,604	786,609	792,427	816,172	828,672	841,234
Hispanic...	484,931	531,103	579,329	597,193	624,149	662,310	694,994
American Indian/Alaskan Native...	55,558	61,653	64,307	65,494	68,784	70,505	71,935
Men...	5,438,593	5,632,690	5,644,113	5,547,126	5,484,342	5,467,370	5,475,620
Temporary residents...	126,706	133,630	143,640	146,966	147,038	144,179	145,573
White, non-Hispanic...	4,184,777	4,273,310	4,195,726	4,067,289	3,963,400	3,918,342	3,890,906
Asian/Pacific Islander...	257,618	284,673	308,564	318,289	335,960	342,084	350,740
Black, non-Hispanic...	448,389	478,648	496,123	500,194	503,512	507,380	513,676
Hispanic...	381,165	418,243	453,488	467,155	485,782	505,162	523,717
American Indian/Alaskan Native...	39,938	44,186	46,572	47,233	48,650	50,223	51,008
Full-time, total...	7,096,494	7,346,260	7,369,223	7,302,852	7,287,543	7,275,785	7,340,530
Temporary residents...	164,457	176,693	188,885	196,806	202,990	201,843	205,702
White, non-Hispanic...	5,410,069	5,510,013	5,437,032	5,310,930	5,220,478	5,163,690	5,173,725
Asian/Pacific Islander...	309,168	339,467	367,609	387,105	416,347	428,108	439,215
Black, non-Hispanic...	678,434	733,802	753,189	763,883	777,098	778,659	795,368
Hispanic...	483,309	528,946	561,566	581,418	604,721	636,116	657,342
American Indian/Alaskan Native...	51,057	57,339	60,942	62,710	65,909	67,369	69,178
Women, full-time...	3,713,333	3,861,956	3,895,813	3,872,354	3,899,481	3,928,344	3,986,969
Temporary residents...	66,569	73,087	80,446	85,478	88,851	89,946	92,971
White, non-Hispanic...	2,798,402	2,861,435	2,838,780	2,779,797	2,756,539	2,748,730	2,767,814
Asian/Pacific Islander...	148,413	164,987	180,569	191,429	207,695	215,553	222,620
Black, non-Hispanic...	400,468	433,871	447,586	454,108	468,089	472,825	485,722
Hispanic...	271,097	296,318	314,275	326,522	341,016	362,999	378,227
American Indian/Alaskan Native...	28,384	32,258	34,157	35,020	37,291	38,291	39,615
Men, full-time...	3,383,161	3,484,304	3,473,410	3,430,498	3,388,062	3,347,441	3,353,561
Temporary residents...	97,888	103,606	108,439	111,328	114,139	111,897	112,731
White, non-Hispanic...	2,611,667	2,648,578	2,598,252	2,531,133	2,463,939	2,414,960	2,405,911
Asian/Pacific Islander...	160,755	174,480	187,040	195,676	208,652	212,555	216,595
Black, non-Hispanic...	277,966	299,931	305,603	309,775	309,009	305,834	309,646
Hispanic...	212,212	232,628	247,291	254,896	263,705	273,117	279,115
American Indian/Alaskan Native...	22,673	25,081	26,785	27,690	28,618	29,078	29,563

SOURCE: Tabulations by National Science Foundation/Division of Science Resources Studies; data from U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Fall Enrollment Survey.

Appendix table 1-6. Total and full-time enrollment of first-time, first-year undergraduate students at all institutions, by sex and race/ethnicity: fall 1990-96

Enrollment status, sex, and race/ethnicity	1990	1991	1992	1993	1994	1995	1996
Total...	2,291,933	2,313,240	2,219,522	2,202,469	2,163,778	2,207,545	2,230,357
Temporary residents...	39,895	41,749	42,014	41,834	41,082	41,108	42,088
White, non-Hispanic...	1,704,178	1,691,467	1,600,109	1,560,531	1,519,331	1,541,430	1,548,087
Asian/Pacific Islander...	98,761	104,021	108,570	116,261	122,070	122,882	123,997
Black, non-Hispanic...	245,039	261,385	254,514	253,133	252,881	252,464	260,483
Hispanic...	183,023	191,744	192,593	208,902	205,597	226,463	231,806
American Indian/Alaskan Native...	21,037	22,874	21,722	21,808	22,817	23,198	23,896
Women...	1,232,347	1,230,328	1,191,857	1,177,231	1,166,415	1,190,773	1,201,597
Temporary residents...	17,633	18,451	18,813	19,241	18,874	19,158	19,679
White, non-Hispanic...	911,553	892,965	855,155	828,874	813,494	824,497	825,270
Asian/Pacific Islander...	48,931	52,269	54,302	58,230	61,716	62,262	62,981
Black, non-Hispanic...	142,169	148,931	146,572	145,122	147,018	146,559	151,885
Hispanic...	100,485	105,049	105,206	113,780	112,734	125,488	128,582
American Indian/Alaskan Native...	11,576	12,663	11,809	11,984	12,579	12,809	13,200
Men...	1,059,586	1,082,912	1,027,665	1,025,238	997,363	1,016,772	1,028,760
Temporary residents...	22,262	23,298	23,201	22,593	22,208	21,950	22,409
White, non-Hispanic...	792,625	798,502	744,954	731,657	705,837	716,933	722,817
Asian/Pacific Islander...	49,830	51,752	54,268	58,031	60,354	60,620	61,016
Black, non-Hispanic...	102,870	112,454	107,942	108,011	105,863	105,905	108,598
Hispanic...	82,538	86,695	87,387	95,122	92,863	100,975	103,224
American Indian/Alaskan Native...	9,461	10,211	9,913	9,824	10,238	10,389	10,696
Full-time, total...	1,648,069	1,684,047	1,636,489	1,645,146	1,630,719	1,682,207	1,708,213
Temporary residents...	30,874	32,273	32,482	32,854	32,923	33,061	33,893
White, non-Hispanic...	1,229,684	1,236,339	1,192,005	1,182,449	1,163,754	1,194,415	1,208,127
Asian/Pacific Islander...	71,859	75,677	79,193	84,209	90,095	91,361	93,351
Black, non-Hispanic...	179,888	195,411	186,830	188,413	189,054	190,853	196,937
Hispanic...	122,160	129,611	131,394	142,439	139,256	156,582	159,434
American Indian/Alaskan Native...	13,604	14,736	14,585	14,782	15,637	15,935	16,471
Women, full-time...	864,081	873,337	862,772	867,770	868,377	900,718	914,989
Temporary residents...	13,210	13,798	14,205	14,747	14,679	15,048	15,367
White, non-Hispanic...	636,946	631,966	621,634	615,815	612,067	631,296	638,032
Asian/Pacific Islander...	35,303	38,011	39,662	42,274	45,643	46,539	47,594
Black, non-Hispanic...	103,651	109,867	106,844	107,788	109,596	110,738	115,177
Hispanic...	67,654	71,725	72,633	79,169	77,878	88,411	89,731
American Indian/Alaskan Native...	7,317	7,970	7,794	7,977	8,514	8,686	9,088
Men, full-time...	783,988	810,710	773,717	777,376	762,342	781,489	793,224
Temporary residents...	17,664	18,475	18,277	18,107	18,244	18,013	18,526
White, non-Hispanic...	592,738	604,373	570,371	566,634	551,687	563,119	570,095
Asian/Pacific Islander...	36,556	37,666	39,531	41,935	44,452	44,822	45,757
Black, non-Hispanic...	76,237	85,544	79,986	80,625	79,458	80,115	81,760
Hispanic...	54,506	57,886	58,761	63,270	61,378	68,171	69,703
American Indian/Alaskan Native...	6,287	6,766	6,791	6,805	7,123	7,249	7,383

SOURCE: Tabulations by National Science Foundation/Division of Science Resources Studies; data from U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Fall Enrollment Survey.

Appendix table 1-7. Among 1988 eighth graders who completed high school, the percentage who enrolled in postsecondary education by 1994, and percentage distribution according to type of institution, by disability status and type: 1994

Disability status and type	Total	4-year institutions	Public 2-year institutions	Other institutions ¹
Total...	70.4	59.4	34.4	6.2
Does not have a disability...	71.7	61.5	33.3	5.3
Has a disability...	62.8	42.0	44.9	13.1
Visual impairment...	70.4	48.4	44.2	7.4
Hearing impairment or deaf...	60.2	39.8	47.0	13.2
Speech impairment...	58.5	49.0	47.6	3.5
Orthopedic impairment...	73.9	71.4	23.6	5.1
Learning disability...	57.5	28.2	53.9	17.9
Other disability or impairment ²	65.9	44.3	42.8	13.0

¹ Private for profit-institutions, public less-than-2-year institutions; or private, not-for-profit less-than-4-year institutions.

² Any other disability, including health problems, emotional problems, mental retardation, or other physical disabilities.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988, Third Follow-up survey, 1994 (NELS: 88/94), Data Analysis System (in U.S. Department of Education, National Center for Education Statistics. 1999. *Students with Disabilities in Postsecondary Education: A Profile of Preparation, Participation, and Outcomes*, NCES 1999-187, by Laura Horn and Jennifer Berkold).

Appendix table 1-8. Percentage distribution of 1995–96 undergraduate students, by disability status, age, institution type, receipt of financial aid, and enrollment intensity: 1996

Age, institution type, receipt of financial aid, and enrollment intensity	Total	Does not have a disability	Has a disability
Age			
18 or younger...	10.2	10.3	8.2
19–23...	44.7	45.0	37.8
24–29...	17.9	18.3	13.6
30–39...	15.0	14.8	17.7
40 or older...	12.2	11.6	22.7
Average age...	27.0	26.0	30.0
Institution type			
4-year institutions...	46.1	46.7	39.6
Other institutions...	53.9	53.3	60.4
Financial aid			
Received any financial aid...	52.4	53.2	47.7
Received federal aid...	39.3	40.0	33.8
Received grants...	40.3	41.1	34.9
Received loans...	31.1	31.7	25.7
Received employer aid...	2.8	2.9	2.0
Received work-study...	8.5	8.8	6.1
Received other aid...	8.0	7.9	11.1
Enrollment intensity			
Full-time full-year...	40.5	40.8	38.7
Full-time part-year...	12.7	12.4	15.6
Part-time full-year...	24.6	24.6	24.5
Part-time, part-year...	22.2	22.3	21.2

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988, Third Follow-up Survey, 1994 (NELS: 88/94), Data Analysis System (in U.S. Department of Education, National Center for Education Statistics. 1999. *Students with Disabilities in Postsecondary Education: A Profile of Preparation, Participation, and Outcomes*, NCES 1999-187, by Laura Horn and Jennifer Berkold).

Women, Minorities, and Persons With Disabilities in Science and Engineering: 2000

**Appendix table 1-9. Total and full-time undergraduate enrollment at 2-year institutions,
by sex and race/ethnicity: fall 1990–96**

Enrollment status, sex, and race/ethnicity	1990	1991	1992	1993	1994	1995	1996
Total...	5,200,148	5,573,230	5,708,924	5,551,977	5,499,378	5,459,520	5,476,207
Temporary residents...	67,529	73,725	90,839	91,834	92,220	89,297	92,400
White, non-Hispanic...	3,909,526	4,125,460	4,108,008	3,933,871	3,820,766	3,752,368	3,709,054
Asian/Pacific Islander...	219,191	258,244	294,266	300,704	318,042	319,542	327,999
Black, non-Hispanic...	519,140	566,493	597,906	594,865	609,499	615,301	626,426
Hispanic...	432,368	490,074	556,552	569,161	595,490	619,649	655,955
American Indian/Alaskan Native...	52,394	59,234	61,353	61,542	63,361	63,363	64,373
Women...	2,980,029	3,201,196	3,296,273	3,205,337	3,180,990	3,135,856	3,127,029
Temporary residents...	32,446	35,540	45,024	46,528	46,861	46,113	48,213
White, non-Hispanic...	2,244,867	2,374,733	2,377,380	2,275,822	2,212,780	2,150,761	2,107,152
Asian/Pacific Islander...	109,413	129,428	150,058	153,672	163,251	164,442	169,229
Black, non-Hispanic...	322,025	352,957	376,249	373,998	385,409	387,084	392,171
Hispanic...	240,413	273,718	311,458	319,069	335,020	350,076	372,396
American Indian/Alaskan Native...	30,865	34,820	36,104	36,248	37,669	37,380	37,868
Men...	2,220,119	2,372,034	2,412,651	2,346,640	2,318,388	2,323,664	2,349,178
Temporary residents...	35,083	38,185	45,815	45,306	45,359	43,184	44,187
White, non-Hispanic...	1,664,659	1,750,727	1,730,628	1,658,049	1,607,986	1,601,607	1,601,902
Asian/Pacific Islander...	109,778	128,816	144,208	147,032	154,791	155,100	158,770
Black, non-Hispanic...	197,115	213,536	221,657	220,867	224,090	228,217	234,255
Hispanic...	191,955	216,356	245,094	250,092	260,470	269,573	283,559
American Indian/Alaskan Native...	21,529	24,414	25,249	25,294	25,692	25,983	26,505
Full-time, total...	1,873,618	2,052,070	2,091,798	2,057,807	2,041,011	1,993,537	2,009,906
Temporary residents...	36,215	39,671	45,766	48,229	49,869	48,068	48,928
White, non-Hispanic...	1,375,799	1,479,121	1,477,967	1,426,491	1,382,761	1,337,624	1,334,522
Asian/Pacific Islander...	76,906	92,123	103,316	109,387	117,904	117,434	117,865
Black, non-Hispanic...	206,724	233,782	238,008	239,634	244,657	239,700	247,673
Hispanic...	157,690	183,204	201,160	208,117	218,992	224,517	234,178
American Indian/Alaskan Native...	20,284	24,169	25,581	25,949	26,828	26,194	26,740
Women, full-time...	995,301	1,098,619	1,132,011	1,119,102	1,120,930	1,102,327	1,112,078
Temporary residents...	16,480	18,260	21,887	23,724	24,314	23,757	24,366
White, non-Hispanic...	720,191	780,078	787,839	763,319	746,728	726,198	723,438
Asian/Pacific Islander...	35,777	43,668	49,981	53,389	57,715	57,771	58,250
Black, non-Hispanic...	123,061	139,813	145,187	146,427	152,126	150,091	154,832
Hispanic...	88,463	103,110	112,559	117,536	124,547	129,270	135,619
American Indian/Alaskan Native...	11,329	13,690	14,558	14,707	15,500	15,240	15,573
Men, full-time...	878,317	953,451	959,787	938,705	920,081	891,210	897,828
Temporary residents...	19,735	21,411	23,879	24,505	25,555	24,311	24,562
White, non-Hispanic...	655,608	699,043	690,128	663,172	636,033	611,426	611,084
Asian/Pacific Islander...	41,129	48,455	53,335	55,998	60,189	59,663	59,615
Black, non-Hispanic...	83,663	93,969	92,821	93,207	92,531	89,609	92,841
Hispanic...	69,227	80,094	88,601	90,581	94,445	95,247	98,559
American Indian/Alaskan Native...	8,955	10,479	11,023	11,242	11,328	10,954	11,167

SOURCE: Tabulations by National Science Foundation/Division of Science Resources Studies; data from U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Fall Enrollment Survey.

**Appendix table 1-10. Total and full-time undergraduate enrollment at 4-year institutions,
by sex and race/ethnicity: fall 1990–96**

Enrollment status, sex, and race/ethnicity	1990	1991	1992	1993	1994	1995	1996
Total...	6,910,699	7,022,105	6,984,854	6,930,836	6,918,323	6,940,306	6,948,363
Temporary residents...	152,471	161,480	167,822	177,305	178,154	179,247	182,376
White, non-Hispanic...	5,363,913	5,383,067	5,280,218	5,167,214	5,096,004	5,053,834	5,022,403
Asian/Pacific Islander...	287,646	306,922	326,197	342,189	365,466	381,286	393,774
Black, non-Hispanic...	629,839	664,759	684,826	697,756	710,185	720,751	728,484
Hispanic...	433,728	459,272	476,265	495,187	514,441	547,823	562,756
American Indian/Alaskan Native...	43,102	46,605	49,526	51,185	54,073	57,365	58,570
Women...	3,692,225	3,761,449	3,753,392	3,730,350	3,752,369	3,796,600	3,821,921
Temporary residents...	60,848	66,035	69,997	75,645	76,475	78,252	80,990
White, non-Hispanic...	2,843,795	2,860,484	2,815,120	2,757,974	2,740,590	2,737,099	2,733,399
Asian/Pacific Islander...	139,806	151,065	161,841	170,932	184,297	194,302	201,804
Black, non-Hispanic...	378,565	399,647	410,360	418,429	430,763	441,588	449,063
Hispanic...	244,518	257,385	267,871	278,124	289,129	312,234	322,598
American Indian/Alaskan Native...	24,693	26,833	28,203	29,246	31,115	33,125	34,067
Men...	3,218,474	3,260,656	3,231,462	3,200,486	3,165,954	3,143,706	3,126,442
Temporary residents...	91,623	95,445	97,825	101,660	101,679	100,995	101,386
White, non-Hispanic...	2,520,118	2,522,583	2,465,098	2,409,240	2,355,414	2,316,735	2,289,004
Asian/Pacific Islander...	147,840	155,857	164,356	171,257	181,169	186,984	191,970
Black, non-Hispanic...	251,274	265,112	274,466	279,327	279,422	279,163	279,421
Hispanic...	189,210	201,887	208,394	217,063	225,312	235,589	240,158
American Indian/Alaskan Native...	18,409	19,772	21,323	21,939	22,958	24,240	24,503
Full-time, total...	5,222,876	5,294,190	5,277,425	5,245,045	5,246,532	5,282,248	5,330,624
Temporary residents...	128,242	137,022	143,119	148,577	153,121	153,775	156,774
White, non-Hispanic...	4,034,270	4,030,892	3,959,065	3,884,439	3,837,717	3,826,066	3,839,203
Asian/Pacific Islander...	232,262	247,344	264,293	277,718	298,443	310,674	321,350
Black, non-Hispanic...	471,710	500,020	515,181	524,249	532,441	538,959	547,695
Hispanic...	325,619	345,742	360,406	373,301	385,729	411,599	423,164
American Indian/Alaskan Native...	30,773	33,170	35,361	36,761	39,081	41,175	42,438
Women, full-time...	2,718,032	2,763,337	2,763,802	2,753,252	2,778,551	2,826,017	2,874,891
Temporary residents...	50,089	54,827	58,559	61,754	64,537	66,189	68,605
White, non-Hispanic...	2,078,211	2,081,357	2,050,941	2,016,478	2,009,811	2,022,532	2,044,376
Asian/Pacific Islander...	112,636	121,319	130,588	138,040	149,980	157,782	164,370
Black, non-Hispanic...	277,407	294,058	302,399	307,681	315,963	322,734	330,890
Hispanic...	182,634	193,208	201,716	208,986	216,469	233,729	242,608
American Indian/Alaskan Native...	17,055	18,568	19,599	20,313	21,791	23,051	24,042
Men, full-time...	2,504,844	2,530,853	2,513,623	2,491,793	2,467,981	2,456,231	2,455,733
Temporary residents...	78,153	82,195	84,560	86,823	88,584	87,586	88,169
White, non-Hispanic...	1,956,059	1,949,535	1,908,124	1,867,961	1,827,906	1,803,534	1,794,827
Asian/Pacific Islander...	119,626	126,025	133,705	139,678	148,463	152,892	156,980
Black, non-Hispanic...	194,303	205,962	212,782	216,568	216,478	216,225	216,805
Hispanic...	142,985	152,534	158,690	164,315	169,260	177,870	180,556
American Indian/Alaskan Native...	13,718	14,602	15,762	16,448	17,290	18,124	18,396

SOURCE: Tabulations by National Science Foundation/Division of Science Resources Studies; data from U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Fall Enrollment Survey.

**Appendix table 1-11. Total and full-time enrollment of first-time, first-year students at
4-year institutions, by sex and race/ethnicity: fall 1990–96**

Enrollment status, sex, and race/ethnicity	1990	1991	1992	1993	1994	1995	1996
Total...	1,170,510	1,171,679	1,136,878	1,154,793	1,150,582	1,192,660	1,206,020
Temporary residents...	23,034	23,697	24,142	23,614	23,512	23,454	23,885
White, non-Hispanic...	872,579	862,361	828,943	832,587	829,365	858,785	866,751
Asian/Pacific Islander...	55,058	57,369	57,782	60,689	65,087	65,605	67,578
Black, non-Hispanic...	127,824	132,726	130,732	133,830	133,567	134,662	136,104
Hispanic...	84,314	87,412	87,300	95,545	89,614	100,260	101,476
American Indian/Alaskan Native...	7,701	8,114	7,979	8,528	9,437	9,894	10,226
Women...	621,021	624,070	606,714	616,510	621,697	649,818	657,236
Temporary residents...	9,565	9,829	10,312	10,299	10,156	10,357	10,660
White, non-Hispanic...	457,866	454,585	439,093	440,431	444,156	463,043	467,252
Asian/Pacific Islander...	27,678	29,408	29,371	30,863	33,780	34,286	35,306
Black, non-Hispanic...	74,600	77,169	75,284	77,174	78,315	79,628	80,930
Hispanic...	47,091	48,541	48,313	53,046	50,059	56,922	57,361
American Indian/Alaskan Native...	4,221	4,538	4,341	4,697	5,231	5,582	5,727
Men...	549,489	547,609	530,164	538,283	528,885	542,842	548,784
Temporary residents...	13,469	13,868	13,830	13,315	13,356	13,097	13,225
White, non-Hispanic...	414,713	407,776	389,850	392,156	385,209	395,742	399,499
Asian/Pacific Islander...	27,380	27,961	28,411	29,826	31,307	31,319	32,272
Black, non-Hispanic...	53,224	55,557	55,448	56,656	55,252	55,034	55,174
Hispanic...	37,223	38,871	38,987	42,499	39,555	43,338	44,115
American Indian/Alaskan Native...	3,480	3,576	3,638	3,831	4,206	4,312	4,499
Full-time, total...	1,063,327	1,055,135	1,045,258	1,061,360	1,062,215	1,105,857	1,120,255
Temporary residents...	20,964	21,704	22,154	21,869	21,861	21,852	22,229
White, non-Hispanic...	795,602	778,028	765,177	769,877	770,297	800,376	810,016
Asian/Pacific Islander...	50,998	53,101	54,354	56,738	61,362	61,844	63,851
Black, non-Hispanic...	114,904	118,583	117,744	120,028	120,143	122,518	124,031
Hispanic...	74,290	76,978	79,066	85,583	80,622	90,945	91,456
American Indian/Alaskan Native...	6,569	6,741	6,763	7,265	7,930	8,322	8,672
Women, full-time...	559,986	557,918	554,699	564,297	571,015	599,809	608,400
Temporary residents...	8,662	8,981	9,437	9,501	9,397	9,631	9,862
White, non-Hispanic...	413,832	406,538	402,480	404,842	409,708	429,307	434,984
Asian/Pacific Islander...	25,597	27,228	27,702	28,927	31,928	32,365	33,404
Black, non-Hispanic...	66,879	68,694	67,634	69,248	70,226	72,114	73,533
Hispanic...	41,457	42,756	43,811	47,815	45,396	51,774	51,774
American Indian/Alaskan Native...	3,559	3,721	3,635	3,964	4,360	4,618	4,843
Men, full-time...	503,341	497,217	490,559	497,063	491,200	506,048	511,855
Temporary residents...	12,302	12,723	12,717	12,368	12,464	12,221	12,367
White, non-Hispanic...	381,770	371,490	362,697	365,035	360,589	371,069	375,032
Asian/Pacific Islander...	25,401	25,873	26,652	27,811	29,434	29,479	30,447
Black, non-Hispanic...	48,025	49,889	50,110	50,780	49,917	50,404	50,498
Hispanic...	32,833	34,222	35,255	37,768	35,226	39,171	39,682
American Indian/Alaskan Native...	3,010	3,020	3,128	3,301	3,570	3,704	3,829

SOURCE: Tabulations by National Science Foundation/Division of Science Resources Studies; data from U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Fall Enrollment Survey.

Appendix table 1-12. Percentage distribution of 1995–96 undergraduates according to major field of study, by disability status

Major field of study	Total	Does not have a disability	Has a disability
Science and engineering, total...	28.3	28.5	27.2
Computer/information science...	3.4	3.3	3.9
Mathematics...	0.6	0.6	0.2
Physical sciences...	1.0	1.0	0.6
Life sciences...	5.7	5.7	3.4
Social/behavioral sciences...	9.5	9.7	9.4
Engineering...	8.1	8.2	9.7
Humanities...	14.6	14.5	17.6
Education...	8.5	8.7	8.3
Business/management...	19.7	19.8	17.4
Health...	12.7	12.8	11.4
Vocational/technical...	2.7	2.6	3.8
Other technical/professional...	13.5	13.3	14.2

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1995–96 National Postsecondary Student Aid Study (NPSAS:96), Undergraduate Data Analysis System (in U.S. Department of Education, National Center for Education Statistics. 1999. *Students with Disabilities in Postsecondary Education: A Profile of Preparation, Participation, and Outcomes*, NCES 1999-187, by Laura Horn and Jennifer Berktold).

Women, Minorities, and Persons With Disabilities in Science and Engineering: 2000

**Appendix table 1-13. Total undergraduate enrollment in engineering programs,
by sex, and by race/ethnicity: 1987–97**

Year	Total	Men	Women	White, non-Hispanic	Asian/Pacific Islander	Black, non-Hispanic	Hispanic	American Indian/ Alaskan Native
Number								
1987...	392,198	331,917	60,281	320,763	32,795	19,142	18,253	1,245
1988...	385,412	325,024	60,388	310,972	34,051	20,405	18,700	1,284
1989...	378,277	318,067	60,210	303,580	33,360	21,013	19,007	1,317
1990...	380,287	318,471	61,816	298,307	35,210	23,562	21,601	1,607
1991...	379,977	316,441	63,536	293,482	37,803	24,563	22,441	1,688
1992...	382,525	316,460	66,065	292,528	38,480	25,722	23,863	1,932
1993...	375,944	309,412	66,532	285,672	37,835	25,920	24,586	1,931
1994...	367,298	300,643	66,655	278,051	37,009	24,994	25,216	2,028
1995...	363,315	296,029	67,286	271,316	38,329	25,569	25,998	2,103
1996...	356,177	288,559	67,618	264,503	37,873	24,922	26,483	2,396
1997...	365,358	294,593	70,765	268,072	39,475	24,809	30,580	2,422
Percent								
1987...	100	84.6	15.4	81.8	8.4	4.9	4.7	0.3
1988...	100	84.3	15.7	80.7	8.8	5.3	4.9	0.3
1989...	100	84.1	15.9	80.3	8.8	5.6	5.0	0.3
1990...	100	83.7	16.3	78.4	9.3	6.2	5.7	0.4
1991...	100	83.3	16.7	77.2	9.9	6.5	5.9	0.4
1992...	100	82.7	17.3	76.5	10.1	6.7	6.2	0.5
1993...	100	82.3	17.7	76.0	10.1	6.9	6.5	0.5
1994...	100	81.9	18.1	75.7	10.1	6.8	6.9	0.6
1995...	100	81.5	18.5	74.7	10.5	7.0	7.2	0.6
1996...	100	81.0	19.0	74.3	10.6	7.0	7.4	0.7
1997...	100	80.6	19.4	73.4	10.8	6.8	8.4	0.7

SOURCE: Engineering Workforce Commission of the American Association of Engineering Societies, special tabulations.

**Appendix table 1-14. Full-time first-year undergraduate enrollment in engineering programs,
by sex, and by race/ethnicity: 1987–97**

Year	Total	Men	Women	White, non-Hispanic	Asian/Pacific Islander	Black, non-Hispanic	Hispanic	American Indian/ Alaskan Native
Number								
1987...	95,453	80,449	15,004	84,489	7,074	6,145	4,465	354
1988...	98,009	82,172	15,837	85,629	7,510	7,075	4,872	433
1989...	95,420	79,888	15,532	82,484	7,669	7,284	5,228	424
1990...	94,346	77,672	16,674	79,565	7,926	8,370	5,885	526
1991...	93,002	76,018	16,984	78,166	8,212	8,305	5,949	582
1992...	93,427	74,870	17,947	77,523	8,153	8,924	6,347	633
1993...	88,875	71,921	16,954	73,750	7,969	8,271	6,247	607
1994...	85,047	68,545	16,502	70,901	7,673	7,372	6,157	617
1995...	86,299	69,102	17,197	71,308	7,767	7,890	6,500	601
1996...	85,375	68,375	17,000	70,635	7,997	7,482	6,602	656
1997...	90,882	72,943	17,943	75,034	9,125	7,403	7,757	688
Percent								
1987...	100	84.3	15.7	88.5	7.4	6.4	4.7	0.4
1988...	100	83.8	16.2	87.4	7.7	7.2	5.0	0.4
1989...	100	83.7	16.3	86.4	8.0	7.6	5.5	0.4
1990...	100	82.3	17.7	84.3	8.4	8.9	6.2	0.6
1991...	100	81.7	18.3	84.0	8.8	8.9	6.4	0.6
1992...	100	80.1	19.2	83.0	8.7	9.6	6.8	0.7
1993...	100	80.9	19.1	83.0	9.0	9.3	7.0	0.7
1994...	100	80.6	19.4	83.4	9.0	8.7	7.2	0.7
1995...	100	80.1	19.9	82.6	9.0	9.1	7.5	0.7
1996...	100	80.1	19.9	82.7	9.4	8.8	7.7	0.8
1997...	100	80.3	19.7	82.6	10.0	8.1	8.5	0.8

SOURCE: Engineering Workforce Commission of the American Association of Engineering Societies, special tabulations.

Women, Minorities, and Persons With Disabilities in Science and Engineering: 2000

Appendix table 1-15. Percentage of 25- to 29-year-old high school completers who had completed college, by race/ethnicity and sex: March 1971–98

March	Total			White, non-Hispanic			Black, non-Hispanic			Hispanic		
	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women
1971...	22.0	25.8	18.1	23.1	27.0	19.1	11.5	12.1	10.9	10.5	15.4	5.8
1972...	23.7	27.3	20.2	24.9	28.6	21.1	13.1	11.6	14.3	7.8	9.5	6.4
1973...	23.6	26.8	20.5	24.8	28.3	21.3	12.7	11.3	13.8	10.8	12.4	9.7
1974...	25.3	28.7	21.8	27.2	31.1	23.2	11.5	12.3	11.0	10.1	8.9	11.2
1975...	26.3	29.7	22.9	27.5	31.1	23.7	14.7	15.3	14.2	16.6	19.7	13.4
1976...	28.0	32.0	24.1	29.3	33.5	25.0	17.6	16.5	18.6	12.7	17.9	8.2
1977...	28.1	31.2	25.1	29.8	33.4	26.3	16.9	16.5	17.3	11.5	11.3	11.7
1978...	27.3	30.2	24.4	28.9	32.6	25.3	15.2	13.6	16.5	17.1	16.4	17.9
1979...	27.0	29.9	24.2	28.6	31.6	25.5	16.6	17.8	15.7	12.9	14.2	11.4
1980...	26.3	28.1	24.5	28.0	30.1	26.0	15.0	14.0	15.8	13.2	15.0	11.8
1981...	24.7	26.6	22.8	26.3	28.4	24.2	14.9	15.4	14.5	12.5	14.4	10.9
1982...	25.2	26.9	23.4	26.7	28.8	24.6	15.6	14.6	16.4	15.9	17.8	14.2
1983...	26.2	27.8	24.6	27.4	29.4	25.4	16.2	16.5	15.9	17.8	16.8	18.8
1984...	25.5	27.1	24.0	27.0	28.5	25.4	14.8	17.1	13.0	18.1	17.0	19.2
1985...	25.7	26.9	24.6	27.3	28.6	26.0	14.4	12.9	15.6	18.2	18.6	17.7
1986...	26.0	26.7	25.3	28.1	29.1	27.1	14.2	11.9	16.3	15.3	15.4	15.2
1987...	25.6	26.1	25.2	27.6	28.0	27.1	13.8	14.0	13.6	14.5	15.7	13.4
1988...	26.4	27.6	25.2	28.0	29.1	26.9	14.8	15.3	14.4	18.1	19.8	16.3
1989...	27.3	28.3	26.5	29.5	30.5	28.5	15.4	15.0	15.6	16.5	15.7	17.2
1990...	27.1	28.0	26.2	29.3	30.0	28.6	16.4	18.6	14.5	14.0	12.9	15.2
1991...	27.2	27.0	27.3	29.7	29.7	29.8	13.4	13.7	13.1	16.3	14.4	18.1
1992...	27.3	26.9	27.8	30.0	29.5	30.4	13.7	14.2	13.2	15.6	14.3	17.0
1993...	27.3	27.2	27.4	29.8	30.0	29.5	16.1	14.8	17.2	13.6	12.1	15.3
1994...	27.0	26.6	27.4	29.7	29.8	29.6	16.2	14.0	17.9	13.3	11.3	15.5
1995...	28.4	28.4	28.5	31.2	30.9	31.4	17.8	19.7	16.1	15.5	14.0	17.1
1996...	31.1	30.2	32.0	34.1	33.6	34.7	17.0	13.9	19.6	16.4	17.1	15.6
1997...	31.8	30.7	32.9	35.2	34.1	36.2	16.4	13.7	18.5	17.8	16.1	19.6
1998...	31.0	29.6	32.4	34.5	32.9	36.1	17.9	16.1	19.3	16.5	15.9	17.1

NOTE: The Current Population Survey (CPS) questions used to obtain educational attainment were changed in 1992. Prior to 1992, "completed college" includes those who have completed 4 or more years of college. For 1992 to 1998, "completed college" includes those with a bachelor's degree or higher. Included in total but not shown separately are other racial/ethnic groups.

SOURCE: U.S. Department of Commerce, Bureau of the Census, March Current Population Surveys. In National Center for Education Statistics, *The Condition of Education 1999* (NCES 1999-022), Table 59-3.

Appendix table 1-16. Percentage distribution of 1989–90 beginning postsecondary students according to postsecondary persistence status and highest undergraduate degree attained, by disability status: spring 1994

Persistence status and highest degree	Total	Does not have a disability	Has a disability
Persistence			
Attained degree or enrolled...	63.2	64.1	52.9
Attained degree or certificate...	50.0	50.7	41.1
Enrolled in 1994...	13.3	13.4	11.8
Not enrolled/no degree or certificate...	36.8	36.0	47.2
Highest undergraduate degree attained by 1994			
None...	50.1	49.3	58.9
Certificate...	12.9	12.5	18.8
Associate's...	11.2	11.6	6.0
Bachelor's...	25.8	26.6	16.3

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study, Second Follow-up (BPS:90/94), Data Analysis System (in U.S. Department of Education, National Center for Education Statistics, 1999, *Students with Disabilities in Postsecondary Education: A Profile of Preparation, Participation, and Outcomes*, NCES 1999-187, by Laura Horn and Jennifer Berkold).

Women, Minorities, and Persons With Disabilities in Science and Engineering: 2000

Appendix table 2-1. Associate's degrees, by sex and field: 1983-96

Sex and field	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Both sexes														
All disciplines...	461,888	457,851	459,087	451,258	440,816	441,093	440,375	459,048	486,297	508,704	519,098	546,574	544,094	540,644
Science and engineering, total...	79,500	83,005	84,708	80,129	78,238	76,691	73,954	72,748	71,026	70,297	71,335	75,132	70,590	67,820
Mathematics...	789	783	790	605	667	682	654	760	670	744	743	766	783	759
Computer science...	9,918	12,913	12,890	10,962	9,286	8,893	8,192	7,840	7,970	9,632	9,532	9,868	9,627	9,401
Physical sciences...	1,415	1,303	1,002	1,013	1,090	1,106	1,029	1,212	1,218	1,086	1,224	1,413	1,459	1,560
Earth, atmospheric, and ocean sciences...	250	214	63	38	40	33	28	33	28	143	168	226	186	189
Agricultural sciences...	2,358	2,079	2,023	1,778	1,569	1,742	1,656	1,696	1,724	1,978	1,896	1,938	1,910	1,895
Biological sciences...	990	1,394	1,233	1,095	995	937	999	1,055	1,142	1,378	1,499	1,907	1,901	2,074
Psychology...	973	1,088	983	939	1,016	1,033	1,113	1,116	997	1,209	1,235	1,756	1,600	1,584
Social sciences...	3,830	3,764	3,579	3,548	3,878	3,198	3,327	3,693	3,090	3,837	4,597	4,863	4,477	5,090
Engineering...	3,273	4,557	3,923	5,289	4,589	3,896	2,735	2,405	2,513	2,715	2,526	2,844	2,285	2,048
Science technologies...	1,463	1,395	1,164	1,081	947	769	898	903	953	969	1,013	1,150	970	965
Engineering technologies...	51,317	50,671	53,667	49,880	49,815	49,646	48,342	46,938	45,106	40,592	40,946	42,414	39,190	35,982
Other science and engineering technologies...	87	87	23	28	50	129	141	110	70	172	52	265	364	556
Interdisciplinary or other sciences...	2,837	2,757	3,368	3,873	4,296	4,627	4,840	4,987	5,545	5,842	5,904	5,722	5,838	5,717
Women														
All disciplines...	253,058	253,334	254,762	253,303	248,589	249,181	253,250	266,615	286,254	299,848	305,835	324,327	324,390	327,554
Science and engineering, total...	18,282	19,807	19,589	18,667	18,106	17,478	17,534	17,571	17,621	19,093	19,696	21,718	20,352	21,070
Mathematics...	304	287	301	234	248	250	239	271	264	280	315	329	345	295
Computer science...	5,008	6,402	6,251	5,318	4,408	4,297	4,044	3,898	3,938	4,909	4,837	4,921	4,631	4,539
Physical sciences...	514	464	344	430	427	458	472	506	539	495	561	630	686	730
Earth, atmospheric, and ocean sciences...	54	36	16	12	14	11	8	21	5	27	38	64	38	58
Agricultural sciences...	976	779	822	669	567	640	691	663	605	653	616	705	610	645
Biological sciences...	510	784	679	640	573	558	576	611	685	805	886	1,137	1,144	1,244
Psychology...	635	728	671	645	722	728	830	830	740	871	953	1,323	1,154	1,179
Social sciences...	2,292	2,411	2,285	2,254	2,522	1,886	1,939	2,154	1,936	2,264	2,781	3,079	2,852	3,434
Engineering...	358	515	422	662	497	426	327	288	280	355	330	370	307	269
Science technologies...	545	506	466	422	376	318	336	298	379	396	396	447	347	378
Engineering technologies...	5,796	5,603	5,721	5,540	5,657	5,593	5,576	5,503	5,329	4,926	4,817	5,515	4,994	5,035
Other science and engineering technologies...	2	4	0	1	2	18	29	14	8	16	8	20	33	42
Interdisciplinary or other sciences...	1,288	1,288	1,611	1,840	2,093	2,295	2,467	2,514	2,913	3,096	3,158	3,178	3,211	3,222

See explanatory information and SOURCE at end of table.

Appendix table 2-1. Associate's degrees, by sex and field: 1983–96

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Sex and field	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Men														
All disciplines...	208,830	204,517	204,325	197,955	192,227	191,912	187,125	192,433	200,043	208,856	213,263	222,247	219,704	213,090
Science and engineering, total...	61,218	63,198	65,119	61,462	60,132	59,213	56,420	55,177	53,405	51,204	51,639	53,414	50,238	46,750
Mathematics...	485	496	489	371	419	432	415	489	406	464	428	437	438	464
Computer science...	4,910	6,511	6,639	5,644	4,878	4,596	4,148	3,942	4,032	4,723	4,695	4,947	4,996	4,862
Physical sciences...	901	839	658	583	663	648	557	706	679	591	663	783	773	830
Earth, atmospheric, and ocean sciences...	196	178	47	26	26	22	20	12	23	116	130	162	148	131
Agricultural sciences...	1,382	1,300	1,201	1,109	1,002	1,102	965	1,033	1,119	1,325	1,280	1,233	1,300	1,250
Biological sciences...	480	610	554	455	422	379	423	444	457	573	613	770	757	830
Psychology...	338	360	312	294	294	305	283	286	257	338	282	433	446	405
Social sciences...	1,538	1,353	1,294	1,294	1,356	1,312	1,388	1,539	1,154	1,573	1,816	1,784	1,625	1,656
Engineering...	2,915	4,042	3,501	4,627	4,092	3,470	2,408	2,117	2,233	2,360	2,196	2,474	1,978	1,779
Science technologies...	918	889	698	659	571	451	562	605	574	573	617	703	623	587
Engineering technologies...	45,521	45,068	47,946	44,340	44,158	44,053	42,766	41,435	39,777	35,666	36,129	36,899	34,196	30,947
Other science and engineering technologies...	85	83	23	27	48	111	112	96	62	156	44	245	331	514
Interdisciplinary or other sciences...	1,549	1,469	1,757	2,033	2,203	2,332	2,373	2,473	2,632	2,746	2,746	2,544	2,627	2,495

NOTE: Unlike in other degrees tables, the science and engineering total includes degrees in science and engineering technologies.

SOURCE: Tabulations by National Science Foundation/Division of Science Resources Studies; data from U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Completions Survey.

Women, Minorities, and Persons With Disabilities in Science and Engineering: 2000

Appendix table 2-2. Associate's degrees, by race/ethnicity and field: 1985-96

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Race/ethnicity and field	1985	1987	1989	1990	1991	1992	1993	1994	1995	1996
Total										
All disciplines	459,087	440,816	440,375	459,048	486,297	508,704	519,098	546,574	544,094	540,644
Science and engineering, total	87,263	80,423	78,132	77,018	75,084	69,296	71,042	74,832	70,404	67,462
Mathematics	789	667	654	760	670	744	743	765	783	758
Computer science	12,890	9,286	8,192	7,840	7,970	9,602	9,512	9,767	9,627	9,198
Physical sciences ¹	1,065	1,131	1,060	1,248	1,249	1,229	1,392	1,639	1,459	1,749
Agricultural sciences	2,393	1,824	1,893	1,983	2,039	2,252	2,227	2,247	1,910	2,278
Biological sciences	1,233	995	999	1,055	1,142	1,378	1,471	1,907	1,901	2,074
Psychology	983	1,016	1,113	1,116	997	1,209	1,237	1,756	1,600	1,584
Social sciences	2,681	2,660	2,836	3,002	2,577	3,232	4,011	4,263	4,477	4,158
Engineering	3,923	4,588	2,732	2,402	2,510	2,715	2,525	2,828	2,285	2,030
Science technologies	1,164	947	898	903	953	889	905	1,040	970	875
Engineering technologies	51,579	47,434	46,180	44,739	42,595	38,015	38,473	39,889	39,190	33,597
Other science and engineering technologies	23	50	141	110	70	172	52	265	364	556
Interdisciplinary or other sciences	8,540	9,825	11,434	11,860	12,312	7,859	8,494	8,466	5,838	8,605
White, non-Hispanic										
All disciplines	355,422	345,546	330,557	343,629	376,869	388,049	392,637	419,962	408,126	403,072
Science and engineering, total	66,770	63,046	57,998	56,214	59,092	51,380	51,789	57,055	51,706	49,341
Mathematics	525	481	461	538	477	522	509	497	479	439
Computer science	9,730	6,879	5,583	5,166	5,577	6,109	6,006	6,636	6,471	6,096
Physical sciences ¹	734	917	841	974	968	848	995	1,230	1,024	1,183
Agricultural sciences	2,138	1,571	1,705	1,775	1,847	2,038	2,017	1,959	1,633	2,067
Biological sciences	676	590	685	709	759	992	977	1,304	1,197	1,356
Psychology	680	781	845	840	738	918	894	1,321	1,146	1,094
Social sciences	1,390	1,715	1,792	1,912	1,609	1,974	2,347	2,729	2,628	2,458
Engineering	2,260	3,235	1,986	1,770	1,867	2,086	1,886	2,133	1,658	1,484
Science technologies	931	785	582	564	693	640	644	794	683	637
Engineering technologies	40,934	37,383	33,584	31,699	33,792	28,242	28,442	31,457	29,646	25,480
Other science and engineering technologies	15	39	111	69	51	132	28	211	275	457
Interdisciplinary or other sciences	6,757	8,670	9,823	10,198	10,714	6,879	7,044	6,784	4,866	6,590
Asian/Pacific Islander										
All disciplines	10,165	11,329	11,761	12,687	15,069	15,369	16,280	18,555	20,976	22,630
Science and engineering, total	2,536	3,331	2,778	2,632	2,593	2,671	2,806	2,923	3,181	3,333
Mathematics	63	69	65	75	65	64	69	77	93	103
Computer science	448	395	336	336	323	484	459	489	513	512
Physical sciences ¹	51	43	62	91	86	106	76	122	124	165
Agricultural sciences	4	10	6	8	8	10	6	10	10	7
Biological sciences	31	59	52	80	126	137	146	172	190	216
Psychology	8	19	14	18	24	34	33	37	57	57
Social sciences	39	87	105	92	64	98	183	192	248	263
Engineering	184	369	194	151	146	185	136	184	152	146
Science technologies	20	22	19	16	31	29	38	35	56	54
Engineering technologies	1,570	1,989	1,663	1,499	1,496	1,311	1,358	1,258	1,458	1,391
Other science and engineering technologies	0	0	0	1	4	4	2	0	13	22
Interdisciplinary or other sciences	118	269	262	265	220	209	300	347	267	397

See explanatory information and SOURCE at end of table.

Appendix table 2-2. Associate's degrees, by race/ethnicity and field: 1985-96

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Race/ethnicity and field	1985	1987	1989	1990	1991	1992	1993	1994	1995	1996
Black, non-Hispanic										
All disciplines...	35,861	33,858	32,185	32,882	37,854	38,721	41,260	45,597	45,923	49,245
Science and engineering, total...	5,475	5,297	4,895	4,842	5,342	4,724	5,361	6,112	5,834	6,061
Mathematics...	24	38	25	20	27	27	26	39	45	36
Computer science...	914	923	803	856	894	1,066	978	1,081	1,046	1,088
Physical sciences ¹ ...	48	71	45	57	78	71	70	90	93	112
Agricultural sciences...	19	27	17	25	14	15	15	20	23	21
Biological sciences...	93	100	63	71	57	75	93	96	147	114
Psychology...	65	73	83	110	103	78	109	149	126	147
Social sciences...	342	285	304	313	332	342	471	415	669	457
Engineering...	148	249	120	88	126	135	201	179	148	134
Science technologies...	61	29	27	36	69	60	63	91	72	97
Engineering technologies...	3,395	3,100	2,829	2,648	3,030	2,445	2,698	3,197	3,015	2,883
Other science and engineering technologies...	8	9	22	25	11	21	20	37	35	75
Interdisciplinary or other sciences...	358	393	557	593	601	389	617	718	415	897
Hispanic										
All disciplines...	22,783	22,804	23,475	24,569	29,019	30,253	33,015	35,557	38,499	39,115
Science and engineering, total...	3,774	4,315	4,200	4,047	4,368	4,439	5,014	5,293	5,583	5,518
Mathematics...	38	39	47	65	55	63	67	85	99	108
Computer science...	638	581	562	526	622	855	1,019	989	1,035	923
Physical sciences ¹ ...	60	37	34	41	45	42	52	92	70	109
Agricultural sciences...	53	91	114	70	57	70	88	109	136	89
Biological sciences...	135	153	88	104	130	126	160	203	208	221
Psychology...	43	64	123	113	88	116	141	154	193	179
Social sciences...	287	301	309	272	313	369	472	549	586	549
Engineering...	126	369	176	98	153	132	153	148	161	132
Science technologies...	67	55	57	57	94	111	97	87	91	51
Engineering technologies...	2,084	2,359	2,232	2,298	2,411	2,317	2,398	2,478	2,777	2,644
Other science and engineering technologies...	0	1	8	10	4	14	1	4	28	1
Interdisciplinary or other sciences...	243	265	450	393	396	224	366	395	199	512
American Indian/Alaskan Native										
All disciplines...	2,953	3,049	3,102	3,290	3,772	3,874	4,213	4,879	5,352	5,221
Science and engineering, total...	474	450	488	434	551	451	568	735	740	781
Mathematics...	4	4	9	14	13	8	15	11	13	9
Computer science...	52	45	58	70	78	61	101	105	111	127
Physical sciences ¹ ...	8	4	2	4	7	5	7	20	22	26
Agricultural sciences...	29	28	23	21	37	38	41	69	54	48
Biological sciences...	8	17	19	13	22	15	25	36	40	42
Psychology...	11	16	13	9	16	31	18	38	35	42
Social sciences...	40	54	46	59	63	75	100	122	121	159
Engineering...	11	27	12	12	21	14	8	18	22	11
Science technologies...	6	2	1	2	10	3	4	6	10	2
Engineering technologies...	267	219	257	168	232	175	210	263	286	242
Other science and engineering technologies...	0	1	0	0	0	0	0	0	3	1
Interdisciplinary or other sciences...	38	33	48	62	52	26	39	47	23	72

See explanatory information and SOURCE at end of table.

Appendix table 2-2. Associate's degrees, by race/ethnicity and field: 1985–96

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Race/ethnicity and field	1985	1987	1989	1990	1991	1992	1993	1994	1995	1996
Other/unknown race/ethnicity										
All disciplines...	25,477	19,745	33,326	36,054	16,737	24,411	22,669	11,855	15,307	11,339
Science and engineering, total...	6,778	2,947	6,699	7,948	2,169	4,528	4,402	1,535	2,167	1,279
Mathematics...	96	24	29	30	17	22	10	17	15	15
Computer science...	834	298	663	735	321	814	712	224	191	209
Physical sciences ¹ ...	144	25	37	48	35	113	125	29	49	68
Agricultural sciences...	116	85	5	66	55	49	27	35	36	28
Biological sciences...	270	41	57	54	26	0	32	40	42	65
Psychology...	162	55	8	19	20	19	25	33	24	33
Social sciences...	524	196	231	313	148	307	318	101	90	111
Engineering...	1,038	219	161	213	129	83	63	77	67	53
Science technologies...	70	50	209	227	45	40	48	23	44	25
Engineering technologies...	2,649	1,809	5,082	5,960	1,108	3,021	2,987	822	1,582	625
Other science and										
engineering technologies...	0	0	0	5	0	0	1	13	5	0
Interdisciplinary or other sciences...	875	145	217	278	265	60	54	121	22	47
Non-resident alien										
All disciplines...	6,426	4,485	5,969	5,937	6,977	8,027	9,024	10,169	9,911	10,022
Science and engineering, total...	1,456	1,037	1,074	901	969	1,103	1,102	1,179	1,193	1,149
Mathematics...	39	12	18	18	16	38	47	39	39	48
Computer science...	274	165	187	151	155	213	237	243	260	243
Physical sciences ¹ ...	20	34	39	33	30	44	67	56	77	86
Agricultural sciences...	34	12	23	18	21	32	33	45	18	18
Biological sciences...	20	35	35	24	22	33	38	56	77	60
Psychology...	14	8	27	7	8	13	17	24	19	32
Social sciences...	59	22	49	41	48	67	120	155	135	161
Engineering...	156	120	83	70	68	80	78	89	77	70
Science technologies...	9	4	3	1	11	6	11	4	14	9
Engineering technologies...	680	575	533	467	526	504	380	414	426	332
Other science and										
engineering technologies...	0	0	0	0	0	1	0	0	5	0
Interdisciplinary or other sciences...	151	50	77	71	64	72	74	54	46	90

¹ In all tables showing degrees before 1995 by race/ethnicity, "Physical science" for all years includes earth, atmospheric, and ocean sciences, as well as physics, astronomy, and chemistry. See NOTE.

NOTE: Unlike in other degrees tables, the science and engineering total includes degrees in science and engineering technologies. Data on race/ethnicity of degree recipients were collected biennially from 1981 through 1989 and annually thereafter. Data on race/ethnicity were collected on broad fields of study only until 1994; therefore, these trend data could not be adjusted to the exact field taxonomies used by NSF. Nonresident aliens include foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

SOURCE: Tabulations by National Science Foundation/Division of Science Resources Studies; data from U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Completions Survey.

Appendix table 2-3. Associate's degrees in science and engineering, by race/ethnicity, sex and field: 1996

Race/ethnicity and sex	Science and engineering, total	Mathematics	Computer science	Physical sciences ¹	Agricultural sciences	Biological sciences	Psychology	Social science	Engineering	Science technologies	Engineering technologies	Other S&E technologies	Inter-disciplinary/other sciences
Total, all races/ethnicities.....	67,462	758	9,198	1,749	2,278	2,074	1,584	4,158	2,030	875	33,597	556	8,605
Female.....	20,981	295	4,444	788	684	1,244	1,179	2,632	265	370	4,635	42	4,403
Male.....	46,481	463	4,754	961	1,594	830	405	1,526	1,765	505	28,962	514	4,202
White, non-Hispanic.....	49,341	439	6,096	1,183	2,067	1,356	1,094	2,458	1,484	637	25,480	457	6,590
Female.....	14,515	177	2,786	523	600	822	831	1,555	191	266	3,338	31	3,395
Male.....	34,826	262	3,310	660	1,467	534	263	903	1,293	371	22,142	426	3,195
Asian/Pacific Islander.....	3,333	103	512	165	7	216	57	263	146	54	1,391	22	397
Female.....	1,097	42	234	83	4	125	37	162	14	29	159	1	207
Male.....	2,236	61	278	82	3	91	20	101	132	25	1,232	21	190
Black, non-Hispanic.....	6,061	36	1,088	112	21	114	147	457	134	97	2,883	75	897
Female.....	2,293	10	664	56	8	67	105	296	24	38	579	9	437
Male.....	3,768	26	424	56	13	47	42	161	110	59	2,304	66	460
Hispanic.....	5,518	108	923	109	89	221	179	549	132	51	2,644	1	512
Female.....	1,871	41	490	46	37	141	128	353	19	22	345	1	248
Male.....	3,647	67	433	63	52	80	51	196	113	29	2,299	0	264
American Indian/													
Alaskan Native.....	781	9	127	26	48	42	42	159	11	2	242	1	72
Female.....	376	2	77	13	18	28	36	118	2	2	41	0	39
Male.....	405	7	50	13	30	14	6	41	9	0	201	1	33
Other/unknown													
race/ethnicity.....	1,279	15	209	68	28	65	33	111	53	25	625	0	47
Female.....	392	6	85	27	12	32	22	64	7	8	95	0	34
Male.....	887	9	124	41	16	33	11	47	46	17	530	0	13
Non-resident alien.....	1,149	48	243	86	18	60	32	161	70	9	332	0	90
Female.....	437	17	108	40	5	29	20	84	8	5	78	0	43
Male.....	712	31	135	46	13	31	12	77	62	4	254	0	47

¹ In this table "Physical sciences" include earth, atmospheric, and ocean sciences, as well as physics, astronomy, and chemistry. See NOTE.

NOTE: Unlike in other degrees tables, the science and engineering total includes degrees in science and engineering technologies. Data on race/ethnicity were collected on broad fields of study only until 1994; therefore, these trend data could not be adjusted to the exact field taxonomies used by NSF. Nonresident aliens include foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

SOURCE: Tabulations by National Science Foundation/Division of Science Resources Studies; data from U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Completions Survey.

Appendix table 2-4. Bachelor's degrees, by field: 1966–96

Year	All fields	Science & engineering fields								All other fields	
		Total, science and engineering	Engineering	Physical sciences	Earth, atmospheric, & ocean sciences	Mathematics	Computer science	Biological/agricultural sciences	Psychology		
1966	524,008	184,313	35,826	15,462	1,712	20,090	89	29,804	16,966	64,364	339,695
1967	562,369	199,832	36,197	15,847	1,936	21,308	222	32,489	19,435	72,398	362,537
1968	636,863	226,597	37,680	17,037	2,339	23,625	459	36,141	23,921	85,395	410,266
1969	734,003	262,189	41,582	18,623	2,924	27,330	933	41,280	29,458	100,059	471,814
1970	798,070	284,230	44,770	18,173	3,351	27,565	1,544	44,447	33,784	110,596	513,840
1971	846,110	294,357	45,248	17,948	3,562	24,918	2,388	45,728	38,154	116,411	551,753
1972	894,110	306,459	45,711	16,814	4,055	23,848	3,402	48,291	43,421	120,917	587,651
1973	930,272	321,085	46,779	16,415	4,374	23,223	4,305	54,687	48,096	123,206	609,187
1974	954,376	326,230	43,248	16,453	4,823	21,813	4,757	61,906	52,256	120,974	628,146
1975	931,663	313,555	39,824	16,001	4,877	18,346	5,039	66,321	51,436	111,711	618,108
1976	934,443	309,491	38,790	16,497	5,046	16,085	5,664	70,004	50,363	107,042	624,952
1977	928,228	303,798	41,357	16,937	5,653	14,303	6,426	70,589	47,794	100,739	624,430
1978	930,201	303,555	47,251	17,143	6,003	12,701	7,224	69,215	45,057	98,961	626,646
1979	931,340	303,162	53,469	17,257	6,082	11,901	8,769	66,781	43,012	95,891	628,178
1980	940,251	304,695	58,810	17,470	6,155	11,473	11,213	63,942	42,513	93,119	635,556
1981	946,877	306,792	63,717	17,446	6,694	11,173	15,233	59,922	41,364	91,243	640,085
1982	964,043	315,023	67,460	17,263	7,061	11,708	20,431	57,535	41,539	92,026	649,020
1983	980,679	317,571	72,670	16,197	7,298	12,662	24,682	55,411	40,825	87,826	663,108
1984	986,345	324,284	76,153	15,831	7,925	13,511	32,435	52,351	40,375	85,703	662,061
1985	990,877	332,273	77,572	16,270	7,576	15,389	39,121	51,312	40,237	84,796	658,604
1986	1,000,204	335,405	76,820	15,784	6,076	16,531	42,195	50,441	40,937	86,621	664,799
1987	1,003,532	331,526	74,425	15,464	4,689	16,515	39,927	48,571	43,195	88,740	672,006
1988	1,006,033	322,482	70,154	14,255	3,554	15,981	34,896	46,925	45,378	91,339	683,551
1989	1,030,171	322,821	66,947	14,148	3,181	15,314	30,963	45,531	48,954	97,783	707,350
1990	1,062,151	329,094	64,705	13,425	2,776	14,674	27,695	46,451	54,018	105,350	733,057
1991	1,107,997	337,675	62,187	13,678	2,728	14,784	25,410	48,783	58,893	111,212	770,322
1992	1,150,072	355,265	61,941	13,875	3,201	14,931	24,958	54,193	64,033	118,133	794,807
1993	1,179,278	366,035	62,705	14,188	3,503	14,853	24,580	59,621	67,251	119,334	813,243
1994	1,183,141	373,261	63,012	14,655	3,868	14,632	24,553	65,268	69,768	117,505	809,880
1995	1,174,436	378,148	63,371	14,897	4,478	13,851	24,769	71,470	72,601	112,711	796,288
1996	1,179,815	384,674	63,114	15,396	4,457	13,076	24,545	78,469	73,828	111,789	795,141

NOTE: For the years 1966–70 the science and engineering total includes degrees granted for "other" sciences; these degrees are not included in any of the specific categories. These degrees constitute less than 2 percent of the total.

SOURCE: Tabulations by National Science Foundation/Division of Science Resources Studies; data from U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Completions Survey.

Appendix table 2-5. Bachelor's degrees awarded to women, by field: 1966-96

Year	All fields	Science & engineering fields								All other fields	
		Total, science and engineering	Engi- neering	Physical sciences	Earth, atmo- spheric, & ocean sciences	Mathe- matics	Computer science	Biological/ agricultural sciences	Psych- ology		
1966	222,971	45,634	146	2,172	161	6,689	13	7,465	6,928	22,060	177,337
1967	238,133	50,787	184	2,205	197	7,310	24	7,948	7,778	25,141	187,346
1968	277,116	61,397	216	2,435	234	8,786	55	8,966	10,130	30,575	215,719
1969	321,138	72,917	312	2,661	291	10,227	121	10,090	12,700	36,515	248,221
1970	344,465	79,702	337	2,626	343	10,317	199	10,700	14,717	40,463	264,763
1971	367,687	85,039	361	2,631	383	9,494	324	11,016	17,037	43,793	282,648
1972	390,479	90,037	492	2,653	495	9,323	461	11,777	20,154	44,682	300,442
1973	408,738	95,995	576	2,589	532	9,345	640	13,779	22,986	45,548	312,743
1974	423,469	102,578	698	2,767	768	8,939	780	16,732	26,407	45,487	320,891
1975	423,239	102,814	845	3,011	827	7,700	956	19,384	27,103	42,988	320,425
1976	425,894	103,921	1,317	3,217	922	6,554	1,124	21,836	27,376	41,575	321,973
1977	429,107	104,993	2,044	3,377	1,174	5,949	1,539	23,250	27,102	40,558	324,114
1978	439,135	107,667	3,482	3,690	1,294	5,246	1,864	24,363	26,540	41,188	331,468
1979	449,946	109,915	4,881	3,899	1,387	4,958	2,463	24,787	26,363	41,177	340,031
1980	462,501	113,480	5,952	4,185	1,462	4,848	3,399	25,011	26,923	41,700	349,021
1981	472,541	115,815	7,063	4,309	1,666	4,781	4,953	24,657	26,917	41,469	356,726
1982	486,500	121,399	8,275	4,526	1,807	5,058	7,115	24,313	27,783	42,522	365,101
1983	497,284	123,191	9,652	4,611	1,848	5,550	8,992	24,279	27,597	40,662	374,093
1984	499,595	125,134	10,729	4,656	1,934	5,987	12,066	23,243	27,426	39,093	374,461
1985	504,217	128,871	11,246	4,836	1,861	7,094	14,431	23,140	27,422	38,841	375,346
1986	510,061	130,662	11,138	4,696	1,354	7,680	15,126	22,953	28,246	39,469	379,399
1987	518,529	131,545	11,404	4,672	1,060	7,682	13,889	22,403	29,796	40,639	386,984
1988	524,797	130,933	10,779	4,582	847	7,412	11,353	22,375	31,794	41,791	393,864
1989	542,605	133,483	10,188	4,371	801	7,050	9,545	21,679	34,663	45,186	409,122
1990	566,284	140,012	9,973	4,319	775	6,811	8,374	22,401	38,619	48,740	426,272
1991	599,045	148,347	9,665	4,425	782	6,980	7,514	23,776	42,738	52,467	450,698
1992	624,677	159,486	9,636	4,586	1,024	6,986	7,210	26,720	46,903	56,421	465,191
1993	641,742	165,720	9,981	4,764	1,050	6,999	6,951	29,182	49,222	57,571	476,022
1994	646,080	170,977	10,403	5,067	1,203	6,768	7,020	31,921	51,019	57,576	475,103
1995	643,290	175,931	10,950	5,292	1,524	6,491	7,063	35,555	52,963	56,093	467,359
1996	651,815	181,333	11,316	5,702	1,485	5,992	6,772	39,369	53,863	56,834	470,482

NOTE: For the years 1966-70 the science and engineering total includes degrees granted for "other" sciences; these degrees are not included in any of the specific categories. These degrees constitute less than 2 percent of the total.

SOURCE: Tabulations by National Science Foundation/Division of Science Resources Studies; data from U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Completions Survey.

Appendix table 2-6. Women as a percentage of all bachelor's degree recipients, by field: 1966-96

Year	All fields	Science & engineering fields								All other fields	Index of dissimilarity ¹
		Total, science and engineering	Engineering	Physical sciences	Earth, atmospheric, & ocean sciences	Mathematics	Computer science	Bio-logical/agri-cultural sciences	Psychology		
1966	42.6	24.8	0.4	14.0	9.4	33.3	14.6	25.0	40.8	34.3	52.2
1967	42.3	25.4	0.5	13.9	10.2	34.3	10.8	24.5	40.0	34.7	51.7
1968	43.5	27.1	0.6	14.3	10.0	37.2	12.0	24.8	42.3	35.8	52.6
1969	43.8	27.8	0.8	14.3	10.0	37.4	13.0	24.4	43.1	36.5	52.6
1970	43.2	28.0	0.8	14.5	10.2	37.4	12.9	24.1	43.6	36.6	51.5
1971	43.5	28.9	0.8	14.7	10.8	38.1	13.6	24.1	44.7	37.6	51.2
1972	43.7	29.4	1.1	15.8	12.2	39.1	13.6	24.4	46.4	37.0	51.1
1973	43.9	29.9	1.2	15.8	12.2	40.2	14.9	25.2	47.8	37.0	51.3
1974	44.4	31.4	1.6	16.8	15.9	41.0	16.4	27.0	50.5	37.6	51.1
1975	45.4	32.8	2.1	18.8	17.0	42.0	19.0	29.2	52.7	38.5	51.8
1976	45.6	33.6	3.4	19.5	18.3	40.7	19.8	31.2	54.4	38.8	51.5
1977	46.2	34.6	4.9	19.9	20.8	41.6	23.9	32.9	56.7	40.3	51.9
1978	47.2	35.5	7.4	21.5	21.6	41.3	25.8	35.2	58.9	41.6	52.9
1979	48.3	36.3	9.1	22.6	22.8	41.7	28.1	37.1	61.3	42.9	54.1
1980	49.2	37.2	10.1	24.0	23.8	42.3	30.3	39.1	63.3	44.8	54.9
1981	49.9	37.8	11.1	24.7	24.9	42.8	32.5	41.1	65.1	45.4	55.7
1982	50.5	38.5	12.3	26.2	25.6	43.2	34.8	42.3	66.9	46.2	56.3
1983	50.7	38.8	13.3	28.5	25.3	43.8	36.4	43.8	67.6	46.3	56.4
1984	50.7	38.6	14.1	29.4	24.4	44.3	37.2	44.4	67.9	45.6	56.6
1985	50.9	38.8	14.5	29.7	24.6	46.1	36.9	45.1	68.2	45.8	57.0
1986	51.0	39.0	14.5	29.8	22.3	46.5	35.8	45.5	69.0	45.6	57.1
1987	51.7	39.7	15.3	30.2	22.6	46.5	34.8	46.1	69.0	45.8	57.6
1988	52.2	40.6	15.4	32.1	23.8	46.4	32.5	47.7	70.1	45.8	57.6
1989	52.7	41.3	15.2	30.9	25.2	46.0	30.8	47.6	70.8	46.2	57.8
1990	53.3	42.5	15.4	32.2	27.9	46.4	30.2	48.2	71.5	46.3	58.1
1991	54.1	43.9	15.5	32.4	28.7	47.2	29.6	48.7	72.6	47.2	58.5
1992	54.3	44.9	15.6	33.1	32.0	46.8	28.9	49.3	73.2	47.8	58.5
1993	54.4	45.3	15.9	33.6	30.0	47.1	28.3	48.9	73.2	48.2	58.5
1994	54.6	45.8	16.5	34.6	31.1	46.3	28.6	48.9	73.1	49.0	58.7
1995	54.8	46.5	17.3	35.5	34.0	46.9	28.5	49.7	73.0	49.8	58.7
1996	55.2	47.1	17.9	37.0	33.3	45.8	27.6	50.2	73.0	50.8	59.2

¹ The dissimilarity index is a measure of the percentage of women baccalaureate recipients who would need to switch fields of study to match the percentage distribution of men receiving baccalaureate degrees. The index is calculated as the sum of the absolute difference between the percentage of women bachelor's degree recipients earning degrees in each field and the percentage of men bachelor's degree recipients earning degrees in each field divided by 2.

NOTE: For the years 1966-70 the science and engineering total includes degrees granted for "other" sciences; these degrees are not included in any of the specific categories. These degrees constitute less than 2 percent of the total.

SOURCE: Tabulations by National Science Foundation/Division of Science Resources Studies; data from U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Completions Survey.

**Appendix table 2-7. Bachelor's degrees in science and engineering,
by sex and detailed field: 1996**

Field	Both sexes	Men	Women	Percent women
Science and engineering, total...	384,674	203,341	181,333	47.1
Engineering, total...	63,114	51,798	11,316	17.9
Aerospace engineering...	1,642	1,395	247	15.0
Chemical engineering...	6,708	4,537	2,171	32.4
Civil engineering...	12,053	9,629	2,424	20.1
Electrical engineering...	16,667	14,695	1,972	11.8
Mechanical engineering...	14,509	12,773	1,736	12.0
Materials engineering...	1,004	781	223	22.2
Industrial engineering...	3,727	2,630	1,097	29.4
Other engineering...	6,804	5,358	1,446	21.3
Physical sciences, total...	15,396	9,694	5,702	37.0
Astronomy...	148	93	55	37.2
Chemistry...	10,713	6,091	4,622	43.1
Physics...	3,703	3,019	684	18.5
Other physical sciences...	832	491	341	41.0
Earth, atmospheric, and ocean sciences, total...	4,457	2,972	1,485	33.3
Atmospheric sciences...	434	348	86	19.8
Earth sciences...	3,838	2,504	1,334	34.8
Oceanography...	185	120	65	35.1
Mathematics and statistics...	13,076	7,084	5,992	45.8
Computer science...	24,545	17,773	6,772	27.6
Agricultural sciences...	16,388	9,884	6,504	39.7
Biological sciences...	62,081	29,216	32,865	52.9
Psychology...	73,828	19,965	53,863	73.0
Social sciences, total...	111,789	54,955	56,834	50.8
Economics...	17,896	12,524	5,372	30.0
Political science and public administration...	39,928	21,578	18,350	46.0
Sociology...	24,169	7,794	16,375	67.8
Anthropology...	6,389	2,331	4,058	63.5
Linguistics...	619	181	438	70.8
History of science...	21	12	9	42.9
Area and ethnic studies...	5,197	1,980	3,217	61.9
Other social sciences...	17,570	8,555	9,015	51.3

SOURCE: Tabulations by National Science Foundation/Division of Science Resources Studies; data from U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Completions Survey.

**Appendix table 2-8. Bachelor's degrees in science and engineering,
by field, citizenship, and race/ethnicity: 1989-96**

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Field	1989	1990	1991	1992	1993	1994	1995	1996
Total, all recipients								
Total, all fields.....	1,030,171	1,062,151	1,107,997	1,150,072	1,179,278	1,183,141	1,174,436	1,179,815
Total science and engineering.....	337,431	345,793	356,785	376,933	388,435	395,380	399,809	405,921
Physical sciences ¹	17,329	16,203	16,407	17,076	17,691	18,525	19,375	19,853
Mathematics.....	15,314	14,674	14,784	14,851	14,870	14,431	13,759	13,201
Computer science.....	30,963	27,695	25,410	24,854	24,477	24,458	24,662	24,405
Biological sciences.....	36,949	38,040	40,351	43,835	47,877	52,213	56,804	61,998
Agricultural sciences.....	8,795	8,622	8,643	10,492	11,827	13,165	14,847	16,669
Social sciences.....	112,180	121,838	130,111	139,884	141,772	139,858	134,431	132,901
Psychology.....	48,954	54,018	58,893	64,043	67,251	69,768	72,601	73,828
Engineering.....	66,947	64,703	62,186	61,898	62,670	62,962	63,330	63,066
Non-S&E ²	692,740	716,358	751,212	773,139	790,843	787,761	774,627	773,894
U.S. citizens and permanent residents, total ³								
Total, all fields.....	1,003,714	1,035,598	1,078,340	1,121,525	1,146,907	1,148,914	1,137,424	1,142,028
Total science and engineering.....	325,108	333,475	344,061	364,695	374,633	381,451	385,055	391,074
Physical sciences ¹	16,724	15,608	15,799	16,469	16,927	17,812	18,652	19,167
Mathematics.....	14,771	14,150	14,206	14,259	14,318	13,869	13,166	12,643
Computer science.....	28,828	25,629	23,373	22,880	22,273	22,185	22,367	22,225
Biological sciences.....	36,076	37,173	39,288	42,842	46,660	51,058	55,523	60,633
Agricultural sciences.....	8,529	8,348	8,373	10,289	11,478	12,919	14,589	16,397
Social sciences.....	109,862	119,288	127,216	136,902	138,391	136,273	130,579	128,893
Psychology.....	48,443	53,493	58,202	63,379	66,421	68,913	71,659	72,812
Engineering.....	61,875	59,786	57,604	57,675	58,165	58,422	58,520	58,304
Non-S&E ²	678,606	702,123	734,279	756,830	772,274	767,463	752,369	750,954
White, non-Hispanics								
Total, all fields.....	840,326	856,686	892,363	921,453	931,603	918,124	892,785	884,128
Total science and engineering.....	266,862	270,225	278,190	292,614	297,171	297,616	294,773	295,082
Physical sciences ¹	14,238	13,055	13,145	13,678	13,941	14,616	14,952	15,088
Mathematics.....	12,287	11,765	11,649	11,723	11,669	11,089	10,343	9,823
Computer science.....	21,711	18,918	17,349	16,844	16,155	15,816	15,532	15,470
Biological sciences.....	28,404	28,814	30,264	32,506	35,080	37,942	40,628	43,680
Agricultural sciences.....	7,938	7,658	7,704	9,382	10,556	11,733	13,120	14,646
Social sciences.....	91,697	98,385	104,783	111,389	111,154	106,863	100,558	97,372
Psychology.....	40,506	44,136	48,134	52,066	53,763	54,870	55,914	55,905
Engineering.....	50,081	47,494	45,162	45,026	44,853	44,687	43,726	43,098
Non-S&E ²	573,464	586,461	614,173	628,839	634,432	620,508	598,012	589,046

See explanatory information and SOURCE at end of table.

**Appendix table 2-8. Bachelor's degrees in science and engineering,
by field, citizenship, and race/ethnicity: 1989-96**

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Field	1989	1990	1991	1992	1993	1994	1995	1996
Asians/Pacific Islanders								
Total, all fields...	37,573	38,027	41,725	46,616	50,587	54,675	59,295	63,117
Total science and engineering...	19,138	19,437	20,552	22,635	24,504	26,420	29,128	31,031
Physical sciences ¹ ...	922	937	983	1,001	1,098	1,096	1,347	1,559
Mathematics...	1,019	874	915	857	915	926	965	935
Computer science...	2,268	2,144	2,010	2,082	2,245	2,247	2,365	2,448
Biological sciences...	2,907	3,245	3,559	4,402	5,103	5,959	7,043	7,958
Agricultural sciences...	144	126	128	154	163	173	287	312
Social sciences...	4,228	4,469	4,852	5,724	6,035	6,726	7,005	7,354
Psychology...	1,575	1,630	1,885	2,150	2,538	2,777	3,331	3,666
Engineering...	6,075	6,012	6,220	6,265	6,407	6,516	6,785	6,799
Non-S&E ² ...	18,435	18,590	21,173	23,981	26,083	28,255	30,167	32,086
Index of dissimilarity ⁴ ...	20.4	21.0	19.6	18.5	18.1	17.8	17.7	17.5
Black, non-Hispanics								
Total, all fields...	56,837	59,301	65,009	71,311	76,667	82,316	85,287	89,554
Total science and engineering...	17,385	18,230	19,987	22,431	24,421	26,289	27,528	29,055
Physical sciences ¹ ...	697	650	753	816	836	921	1,034	1,100
Mathematics...	792	720	811	904	965	992	995	981
Computer science...	2,457	2,247	1,997	2,090	2,213	2,398	2,498	2,415
Biological sciences...	1,916	1,994	2,111	2,385	2,739	2,980	3,231	3,811
Agricultural sciences...	143	171	162	206	219	268	263	363
Social sciences...	6,570	7,226	8,236	9,489	10,254	10,835	10,921	11,357
Psychology...	2,743	3,150	3,688	4,179	4,618	5,236	5,741	6,028
Engineering...	2,067	2,072	2,229	2,362	2,577	2,659	2,845	3,000
Non-S&E ² ...	39,452	41,071	45,022	48,880	52,246	56,027	57,759	60,499
Index of dissimilarity ⁴ ...	3.6	3.2	2.8	2.8	2.9	3.6	3.9	4.0
Hispanics								
Total, all fields...	41,361	43,864	49,027	53,007	57,845	62,683	66,691	71,015
Total science and engineering...	13,327	13,918	15,351	17,391	18,442	20,529	22,190	23,791
Physical sciences ¹ ...	563	522	533	546	599	733	800	872
Mathematics...	373	413	480	482	470	543	536	585
Computer science...	1,195	1,085	1,215	1,173	1,096	1,135	1,307	1,280
Biological sciences...	2,090	2,119	2,264	2,477	2,652	2,901	3,090	3,521
Agricultural sciences...	196	218	213	214	217	336	386	506
Social sciences...	4,197	4,645	5,334	6,519	6,860	7,748	7,877	8,260
Psychology...	2,152	2,405	2,746	3,247	3,587	3,990	4,543	5,036
Engineering...	2,561	2,511	2,566	2,733	2,961	3,143	3,651	3,731
Non-S&E ² ...	28,034	29,946	33,676	35,616	39,403	42,154	44,501	47,224
Index of dissimilarity ⁴ ...	2.6	2.2	2.1	2.5	1.7	1.8	2.0	1.8

See explanatory information and SOURCE at end of table.

**Appendix table 2-8. Bachelor's degrees in science and engineering,
by field, citizenship, and race/ethnicity: 1989-96**

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Field	1989	1990	1991	1992	1993	1994	1995	1996
American Indians/Alaskan Natives								
Total, all fields.....	3,967	4,212	4,486	5,130	5,574	6,064	6,454	6,813
Total science and engineering.....	1,238	1,271	1,344	1,561	1,819	2,004	2,126	2,268
Physical sciences ¹	62	73	69	63	93	83	98	104
Mathematics.....	53	45	43	46	55	59	58	53
Computer science.....	90	84	80	79	81	78	110	89
Biological sciences.....	145	130	176	181	211	246	285	316
Agricultural sciences.....	58	59	53	60	64	109	124	139
Social sciences.....	445	523	530	639	804	817	823	854
Psychology.....	208	211	235	311	335	394	407	470
Engineering.....	177	146	158	182	176	218	221	243
Non-S&E ²	2,729	2,941	3,142	3,569	3,755	4,060	4,328	4,545
Index of dissimilarity ⁴	2.0	2.9	2.2	2.1	2.9	2.8	2.0	2.5
U.S. citizens and permanent residents, unknown race/ethnicity								
Total, all fields.....	23,650	33,508	25,730	24,008	24,631	25,052	26,912	27,401
Total science and engineering.....	7,158	10,394	8,637	8,063	8,276	8,593	9,310	9,847
Physical sciences ¹	242	371	316	365	360	363	421	444
Mathematics.....	247	333	308	247	244	260	269	266
Computer science.....	1,107	1,151	722	612	483	511	555	523
Biological sciences.....	614	871	914	891	875	1,030	1,246	1,347
Agricultural sciences.....	50	116	113	273	259	300	409	431
Social sciences.....	2,725	4,040	3,481	3,142	3,284	3,284	3,395	3,696
Psychology.....	1,259	1,961	1,514	1,426	1,580	1,646	1,723	1,707
Engineering.....	914	1,551	1,269	1,107	1,191	1,199	1,292	1,433
Non-S&E ²	16,492	23,114	17,093	15,945	16,355	16,459	17,602	17,554
Index of dissimilarity ⁴	4.7	3.0	3.3	2.3	2.3	2.4	1.9	3.0
Nonresident aliens ⁵								
Total, all fields.....	26,457	26,553	29,657	28,547	32,371	34,227	37,012	37,787
Total science and engineering.....	12,323	12,318	12,724	12,238	13,802	13,929	14,754	14,847
Physical sciences ¹	605	595	608	607	764	713	723	686
Mathematics.....	543	524	578	592	552	562	593	558
Computer science.....	2,135	2,066	2,037	1,974	2,204	2,273	2,295	2,180
Biological sciences.....	873	867	1,063	993	1,217	1,155	1,281	1,365
Agricultural sciences.....	266	274	270	203	349	246	258	272
Social sciences.....	2,318	2,550	2,895	2,982	3,381	3,585	3,852	4,008
Psychology.....	511	525	691	664	830	855	942	1,016
Engineering.....	5,072	4,917	4,582	4,223	4,505	4,540	4,810	4,762
Non-S&E ²	14,134	14,235	16,933	16,309	18,569	20,298	22,258	22,940

See explanatory information and SOURCE at end of table.

**Appendix table 2-8. Bachelor's degrees in science and engineering,
by field, citizenship, and race/ethnicity: 1989–96**

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¹ In all tables showing degrees before 1995 by race/ethnicity, "Physical science" for all years includes earth, atmospheric, and ocean sciences, as well as physics, astronomy, and chemistry. See NOTE.

² Non-S&E refers to non-science and non-engineering.

³ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

⁴ The dissimilarity index is a measure of the percentage of baccalaureate recipients in a racial/ethnic group who would need to switch fields of study to match the percentage distribution by field of white students receiving baccalaureate degrees. The index is calculated as the sum of the absolute difference between the percentage of degree recipients in a particular racial/ethnic group earning degrees in each field and the percentage of white degree recipients earning degrees in each field divided by 2.

⁵ Nonresident aliens include foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTE: Data on race/ethnicity of degree recipients were collected on broad fields of study only until 1994; therefore, these trend data could not be adjusted to the exact field taxonomies used by NSF.

SOURCE: Tabulations by National Science Foundation/Division of Science Resources Studies; data from U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Completions Survey.

Women, Minorities, and Persons With Disabilities in Science and Engineering: 2000

Appendix table 2-9. Percentage distribution of bachelor's degrees in science and engineering to U.S. citizens and permanent residents, by field and race/ethnicity: 1989-96

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Field	1989	1990	1991	1992	1993	1994	1995	1996
All U.S. citizens and permanent residents ²								
Total science and engineering.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Physical sciences ¹	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mathematics.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Computer science.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Biological sciences.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Agricultural sciences.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Social sciences.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Psychology.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Engineering.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
White, non-Hispanics								
Total science and engineering.....	82.1	81.0	80.9	80.2	79.3	78.0	76.6	75.5
Physical sciences ¹	85.1	83.6	83.2	83.1	82.4	82.1	80.2	78.7
Mathematics.....	83.2	83.1	82.0	82.2	81.5	80.0	78.6	77.7
Computer science.....	75.3	73.8	74.2	73.6	72.5	71.3	69.4	69.6
Biological sciences.....	78.7	77.5	77.0	75.9	75.2	74.3	73.2	72.0
Agricultural sciences.....	93.1	91.7	92.0	91.2	92.0	90.8	89.9	89.3
Social sciences.....	83.5	82.5	82.4	81.4	80.3	78.4	77.0	75.5
Psychology.....	83.6	82.5	82.7	82.2	80.9	79.6	78.0	76.8
Engineering.....	80.9	79.4	78.4	78.1	77.1	76.5	74.7	73.9
Asians/Pacific Islanders								
Total science and engineering.....	5.9	5.8	6.0	6.2	6.5	6.9	7.6	7.9
Physical sciences ¹	5.5	6.0	6.2	6.1	6.5	6.2	7.2	8.1
Mathematics.....	6.9	6.2	6.4	6.0	6.4	6.7	7.3	7.4
Computer science.....	7.9	8.4	8.6	9.1	10.1	10.1	10.6	11.0
Biological sciences.....	8.1	8.7	9.1	10.3	10.9	11.7	12.7	13.1
Agricultural sciences.....	1.7	1.5	1.5	1.5	1.4	1.3	2.0	1.9
Social sciences.....	3.8	3.7	3.8	4.2	4.4	4.9	5.4	5.7
Psychology.....	3.3	3.0	3.2	3.4	3.8	4.0	4.6	5.0
Engineering.....	9.8	10.1	10.8	10.9	11.0	11.2	11.6	11.7
Black, non-Hispanics								
Total science and engineering.....	5.3	5.5	5.8	6.2	6.5	6.9	7.1	7.4
Physical sciences ¹	4.2	4.2	4.8	5.0	4.9	5.2	5.5	5.7
Mathematics.....	5.4	5.1	5.7	6.3	6.7	7.2	7.6	7.8
Computer science.....	8.5	8.8	8.5	9.1	9.9	10.8	11.2	10.9
Biological sciences.....	5.3	5.4	5.4	5.6	5.9	5.8	5.8	6.3
Agricultural sciences.....	1.7	2.0	1.9	2.0	1.9	2.1	1.8	2.2
Social sciences.....	6.0	6.1	6.5	6.9	7.4	8.0	8.4	8.8
Psychology.....	5.7	5.9	6.3	6.6	7.0	7.6	8.0	8.3
Engineering.....	3.3	3.5	3.9	4.1	4.4	4.6	4.9	5.1

See explanatory information and SOURCE at end of table.

Appendix table 2-9. Percentage distribution of bachelor's degrees in science and engineering to U.S. citizens and permanent residents, by field and race/ethnicity: 1989-96

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Field	1989	1990	1991	1992	1993	1994	1995	1996
Hispanics								
Total science and engineering.....	4.1	4.2	4.5	4.8	4.9	5.4	5.8	6.1
Physical sciences ¹	3.4	3.3	3.4	3.3	3.5	4.1	4.3	4.5
Mathematics.....	2.5	2.9	3.4	3.4	3.3	3.9	4.1	4.6
Computer science.....	4.1	4.2	5.2	5.1	4.9	5.1	5.8	5.8
Biological sciences.....	5.8	5.7	5.8	5.8	5.7	5.7	5.6	5.8
Agricultural sciences.....	2.3	2.6	2.5	2.1	1.9	2.6	2.6	3.1
Social sciences.....	3.8	3.9	4.2	4.8	5.0	5.7	6.0	6.4
Psychology.....	4.4	4.5	4.7	5.1	5.4	5.8	6.3	6.9
Engineering.....	4.1	4.2	4.5	4.7	5.1	5.4	6.2	6.4
American Indians/Alaskan Natives								
Total science and engineering.....	0.4	0.4	0.4	0.4	0.5	0.5	0.6	0.6
Physical sciences ¹	0.4	0.5	0.4	0.4	0.5	0.5	0.5	0.5
Mathematics.....	0.4	0.3	0.3	0.3	0.4	0.4	0.4	0.4
Computer science.....	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.4
Biological sciences.....	0.4	0.3	0.4	0.4	0.5	0.5	0.5	0.5
Agricultural sciences.....	0.7	0.7	0.6	0.6	0.6	0.8	0.8	0.8
Social sciences.....	0.4	0.4	0.4	0.5	0.6	0.6	0.6	0.7
Psychology.....	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.6
Engineering.....	0.3	0.2	0.3	0.3	0.3	0.4	0.4	0.4
U.S. citizens and permanent residents, unknown race/ethnicity								
Total science and engineering.....	2.2	3.1	2.5	2.2	2.2	2.3	2.4	2.5
Physical sciences ¹	1.4	2.4	2.0	2.2	2.1	2.0	2.3	2.3
Mathematics.....	1.7	2.4	2.2	1.7	1.7	1.9	2.0	2.1
Computer science.....	3.8	4.5	3.1	2.7	2.2	2.3	2.5	2.4
Biological sciences.....	1.7	2.3	2.3	2.1	1.9	2.0	2.2	2.2
Agricultural sciences.....	0.6	1.4	1.3	2.7	2.3	2.3	2.8	2.6
Social sciences.....	2.5	3.4	2.7	2.3	2.4	2.4	2.6	2.9
Psychology.....	2.6	3.7	2.6	2.2	2.4	2.4	2.4	2.3
Engineering.....	1.5	2.6	2.2	1.9	2.0	2.1	2.2	2.5

¹ In all tables showing degrees before 1995 by race/ethnicity, "Physical science" for all years includes earth, atmospheric, and ocean sciences, as well as physics, astronomy, and chemistry. See NOTE.

² Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

NOTE: Data on race/ethnicity of degree recipients were collected on broad fields of study only until 1994; therefore, these trend data could not be adjusted to the exact field taxonomies used by NSF.

SOURCE: Tabulations by National Science Foundation/Division of Science Resources Studies; data from U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Completions Survey.

Appendix table 2-10. Bachelor's degrees, by detailed field and race/ethnicity of recipient: 1996

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Field	Total, all recipients	U.S. citizens and permanent residents ¹							Non-resident aliens ²
		Total	White, non-Hispanics	Asians/Pacific Islanders	Black, non-Hispanics	Hispanics	American Indians/Alaskan Natives	Unknown	
Total, all fields.....	1,179,815	1,142,028	884,128	63,117	89,554	71,015	6,813	27,401	37,787
Total science and engineering.....	384,674	369,927	276,786	30,419	28,397	22,886	2,149	9,290	14,747
Engineering.....	63,114	58,351	43,143	6,800	3,000	3,731	243	1,434	4,763
Aerospace engineering.....	1,642	1,519	1,172	159	51	89	5	43	123
Chemical engineering.....	6,708	6,139	4,577	735	337	331	31	128	569
Civil engineering.....	12,053	11,615	9,117	986	409	738	59	306	438
Electrical engineering.....	16,667	14,680	9,427	2,688	1,035	1,052	55	423	1,987
Industrial engineering.....	3,727	3,279	2,350	322	238	316	8	45	448
Materials engineering.....	1,004	975	787	88	29	42	4	25	29
Mechanical engineering.....	14,509	13,727	10,688	1,177	632	849	57	324	782
Other engineering.....	6,804	6,417	5,025	645	269	314	24	140	387
Sciences.....	321,560	311,576	233,643	23,619	25,397	19,155	1,906	7,856	9,984
Physical sciences.....	15,396	14,764	11,078	1,466	1,040	767	81	332	632
Astronomy.....	148	140	107	15	3	6	0	9	8
Chemistry.....	10,713	10,298	7,487	1,172	789	616	57	177	415
Physics.....	3,703	3,510	2,842	236	176	113	21	122	193
Other physical sciences.....	832	816	642	43	72	32	3	24	16
Earth, atmospheric, & ocean sciences.....	4,457	4,403	4,010	93	60	105	23	112	54
Atmospheric sciences.....	434	433	403	9	7	7	1	6	1
Geosciences.....	3,838	3,790	3,447	79	48	91	20	105	48
Oceanography.....	185	180	160	5	5	7	2	1	5
Mathematics.....	13,076	12,525	9,799	910	942	556	53	265	551
Computer sciences.....	24,545	22,359	15,577	2,454	2,427	1,284	89	528	2,186
Biological sciences.....	62,081	60,714	43,739	7,967	3,812	3,531	317	1,348	1,367
Biology, general.....	45,612	44,668	32,343	5,130	3,330	2,707	223	935	944
Biochemistry and biophysics.....	3,385	3,237	1,974	923	110	112	16	102	148
Botany.....	404	395	338	23	1	11	4	18	9
Cell and molecular biology.....	2,103	2,055	1,092	711	51	106	8	87	48
Microbiology/bacteriology.....	2,245	2,186	1,522	259	113	226	20	46	59
Genetics, plant and animal.....	257	249	179	41	6	17	0	6	8
Zoology.....	3,549	3,494	2,896	361	62	95	21	59	55
Biological sciences, other.....	4,526	4,430	3,395	519	139	257	25	95	96
Agricultural sciences.....	16,388	16,118	14,399	307	341	504	139	428	270
Psychology.....	73,828	72,812	55,905	3,666	6,028	5,036	470	1,707	1,016
Social sciences, total.....	111,789	107,881	79,136	6,756	10,747	7,372	734	3,136	3,908
Economics.....	17,896	16,109	11,640	1,994	1,020	841	67	547	1,787
Political science.....	39,928	38,798	28,933	2,009	3,811	2,841	228	976	1,130
Sociology.....	24,169	23,845	16,777	1,090	3,560	1,685	186	547	324
Other social sciences.....	29,796	29,129	21,786	1,663	2,356	2,005	253	1,066	667
Non-S&E ³	795,141	772,101	607,342	32,698	61,157	48,129	4,664	18,111	23,040

See explanatory information and SOURCE at end of table.

Appendix table 2-10. Bachelor's degrees, by detailed field and race/ethnicity of recipient: 1996

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¹ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

² Nonresident aliens include foreign citizens on temporary visas only.

³ Non-S&E refers to non-science and non-engineering.

NOTE: Racial/ethnic data were collected by broad fields of study only until 1994; therefore, data could not be adjusted to the exact field taxonomies used by NSF. Because data were collected by detailed field in 1996 (as well as in 1995) the data in this table do correspond to the field taxonomies used by NSF and therefore will match other tables in this report showing master's degrees by sex, but will not match data shown in other tables in this report showing master's degrees by race/ethnicity over time. The largest effect is in the social sciences: NSF excludes history and includes public administration and public policy, linguistics, gerontology, and agricultural economics in this category.

SOURCE: Tabulations by National Science Foundation/Division of Science Resources Studies; data from U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Completions Survey.

Women, Minorities, and Persons With Disabilities in Science and Engineering: 2000

Appendix table 2-11. Bachelor's degrees awarded to blacks by Historically Black Colleges and Universities (HBCUs): 1990-96

Academic discipline	1990	1991	1992	1993	1994	1995	1996
Degrees awarded to blacks, all institutions							
Total science and engineering.....	18,230	19,987	22,431	24,421	26,289	27,528	29,055
Engineering.....	2,072	2,229	2,362	2,577	2,659	2,845	3,000
Science, total.....	16,158	17,758	20,069	21,844	23,630	24,683	26,055
Physical sciences ¹	650	753	816	836	921	1,034	1,100
Mathematics and statistics.....	720	811	904	965	992	995	981
Computer science.....	2,247	1,997	2,090	2,213	2,398	2,498	2,415
Agricultural sciences.....	171	162	206	219	268	263	363
Biological sciences.....	1,994	2,111	2,385	2,739	2,980	3,231	3,811
Psychology.....	3,150	3,688	4,179	4,618	5,236	5,741	6,028
Social sciences.....	7,226	8,236	9,489	10,254	10,835	10,921	11,357
Degrees to blacks from HBCUs							
Total science and engineering.....	5,190	5,679	6,363	7,368	7,804	8,361	8,980
Engineering.....	524	589	594	700	690	798	894
Science, total.....	4,666	5,090	5,769	6,668	7,114	7,563	8,086
Physical sciences ¹	296	358	376	390	421	471	547
Mathematics and statistics.....	307	369	420	463	449	466	443
Computer science.....	899	748	780	904	904	967	979
Agricultural sciences.....	87	96	117	109	134	123	197
Biological sciences.....	764	792	906	1,155	1,197	1,357	1,628
Psychology.....	662	841	969	1,140	1,308	1,432	1,512
Social sciences.....	1,651	1,886	2,201	2,507	2,701	2,747	2,780
Degrees to blacks from HBCUs as a percentage of total degrees awarded to blacks							
Total science and engineering.....	28.5	28.4	28.4	30.2	29.7	30.4	30.9
Engineering.....	25.3	26.4	25.1	27.2	25.9	28.0	29.8
Science, total.....	28.9	28.7	28.7	30.5	30.1	30.6	31.0
Physical sciences ¹	45.5	47.5	46.1	46.7	45.7	45.6	49.7
Mathematics and statistics.....	42.6	45.5	46.5	48.0	45.3	46.8	45.2
Computer science.....	40.0	37.5	37.3	40.8	37.7	38.7	40.5
Agricultural sciences.....	50.9	59.3	56.8	49.8	50.0	46.8	54.3
Biological sciences.....	38.3	37.5	38.0	42.2	40.2	42.0	42.7
Psychology.....	21.0	22.8	23.2	24.7	25.0	24.9	25.1
Social sciences.....	22.8	22.9	23.2	24.4	24.9	25.2	24.5

¹ In all tables showing degrees before 1995 by race/ethnicity, "Physical science" for all years includes earth, atmospheric, and ocean sciences, as well as physics, astronomy, and chemistry. See NOTE.

NOTE: Data on race/ethnicity of degree recipients were collected on broad fields of study only until 1994; therefore, these trend data could not be adjusted to the exact field taxonomies used by NSF.

SOURCE: Tabulations by the National Science Foundation/Division of Science Resources Studies; data from U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Completions Survey.

Appendix table 2-12. Top 25 institutions awarding science and engineering bachelor's degrees to black men, by broad field: 1996

Page 1 of 2

Total, science and engineering			Science		Engineering	
Rank	Academic institution	Number of degrees	Academic institution	Number of degrees	Academic institution	Number of degrees
	Total of all academic institutions...	11,700	Total of all academic institutions...	9,736	Total of all academic institutions...	1,964
1	Morehouse College *	244	Morehouse College *	218	North Carolina Agricultural & Tech State Univ *	134
2	North Carolina Agricultural & Tech State Univ *	210	Hampton University *	115	Tuskegee University *	75
3	Florida Agricultural and Mechanical University *	173	Florida Agricultural and Mechanical University *	112	Georgia Institute of Technology, Main Campus...	66
4	Southern University A&M Col at Baton Rouge *	154	Southern University A&M Col at Baton Rouge *	102	Prairie View A&M University *	64
5	Tuskegee University *	150	Howard University *	93	Florida Agricultural and Mechanical University *	61
6	CUNY City College...	144	Xavier University of Louisiana *	91	CUNY City College...	59
7	Howard University *	135	North Carolina Central University *	89	Southern University A&M Col at Baton Rouge *	52
8	Morgan State University *	126	Norfolk State University *	86	Morgan State University *	43
9	Hampton University *	121	University of Maryland at College Park...	86	Howard University *	42
10	Prairie View A&M University *	117	CUNY City College...	85	New Jersey Institute of Technology...	38
11	University of Maryland at College Park...	112	Grambling State University *	83	Clemson University...	31
12	Xavier University of Louisiana *	91	Morgan State University *	83	North Carolina State University at Raleigh...	28
13	Norfolk State University *	89	Jackson State University *	81	University of Maryland at College Park...	26
14	North Carolina Central University *	89	North Carolina Agricultural & Tech State Univ *	76	Rensselaer Polytechnic Institute...	26
15	Rutgers, the State Univ of NJ, New Brunswick...	88	Tuskegee University *	75	Morehouse College *	26
16	Grambling State University *	83	South Carolina State University *	73	University of Michigan at Ann Arbor...	23
17	Tennessee State University *	82	Rutgers, the State Univ of NJ, New Brunswick...	70	United States Air Force Academy...	23
18	Jackson State University *	81	Alabama Agricultural and Mechanical University *	67	Mississippi State University...	23
19	University of California-Berkeley...	74	Tennessee State University *	66	Auburn University, Main Campus...	21
20	South Carolina State University *	73	University of California-Los Angeles...	65	Purdue University, Main Campus...	19
21	Georgia Institute of Technology, Main Campus...	72	CUNY York College...	63	Temple University...	18
22	Alabama Agricultural and Mechanical University *	71	University of California-Berkeley...	63	Rutgers, the State Univ of NJ, New Brunswick...	18
23	University of California-Los Angeles...	71	University of North Carolina at Chapel Hill...	62	University of Florida...	17
24	University of Michigan at Ann Arbor...	65	Strayer College...	60	Massachusetts Institute of Technology...	17
25	CUNY York College...	63	Fayetteville State University *	57	Florida International University...	17
	University of Virginia, Main Campus...	63				

See explanatory information and SOURCE at end of table.

Appendix table 2-12. Top 25 institutions awarding science and engineering bachelor's degrees to black women, by broad field: 1996

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Total, science and engineering			Science		Engineering	
Rank	Academic institution	Number of degrees	Academic institution	Number of degrees	Academic institution	Number of degrees
	Total of all academic institutions.....	17,355	Total of all academic institutions.....	16,319	Total of all academic institutions.....	1,036
1	Spelman College *	322	Spelman College *	308	North Carolina Agricultural & Tech State Univ *	88
2	Howard University *	270	Howard University *	244	Georgia Institute of Technology, Main Campus.....	62
3	Xavier University of Louisiana *	231	Xavier University of Louisiana *	231	Tuskegee University *	50
4	Florida Agricultural and Mechanical University *	221	Hampton University *	191	Florida Agricultural and Mechanical University *	41
5	Hampton University *	200	Florida Agricultural and Mechanical University *	180	Prairie View A&M University *	31
6	North Carolina Agricultural & Tech State Univ *	196	Southern University A&M Col at Baton Rouge *	170	Morgan State University *	30
7	Southern University A&M Col at Baton Rouge *	196	Grambling State University *	161	Howard University *	26
8	Morgan State University *	186	Morgan State University *	156	Southern University A&M Col at Baton Rouge *	26
9	Grambling State University *	161	North Carolina Central University *	152	Purdue University, Main Campus.....	23
10	North Carolina Central University *	152	Norfolk State University *	130	University of Michigan at Ann Arbor.....	21
11	Tuskegee University *	152	Jackson State University *	126	North Carolina State University at Raleigh.....	20
12	Norfolk State University *	131	Rutgers, the State Univ of NJ, New Brunswick.....	119	Tennessee State University *	19
13	Jackson State University *	126	CUNY Herbert H Lehman College.....	118	Mississippi State University.....	18
14	University of California-Los Angeles.....	124	University of California-Los Angeles.....	117	Auburn University, Main Campus.....	14
15	Tennessee State University *	123	University of North Carolina at Chapel Hill.....	116	Northwestern Univ.....	14
16	Rutgers, the State Univ of NJ, New Brunswick.....	121	Chicago State University.....	111	Spelman College *	14
17	CUNY Herbert H Lehman College.....	118	Clark Atlanta University *	111	University of South Florida.....	14
18	University of Maryland at College Park.....	117	University of Virginia, Main Campus.....	111	Texas A&M University Main Campus.....	13
19	University of North Carolina at Chapel Hill.....	116	North Carolina Agricultural & Tech State Univ ^	108	University of Maryland at College Park.....	12
20	University of Virginia, Main Campus.....	116	University of South Carolina at Columbia.....	107	Clemson University.....	11
21	University of South Carolina at Columbia.....	113	University of Maryland at College Park.....	105	New Jersey Institute of Technology.....	11
22	Chicago State University.....	111	Tennessee State University *	104	University of Alabama.....	11
23	Clark Atlanta University *	111	CUNY York College.....	103	University of Missouri, Rolla.....	11
24	Prairie View A&M University *	109	Tuskegee University *	102	University of Tennessee at Knoxville.....	11
25	University of Michigan at Ann Arbor.....	105	CUNY Hunter College.....	101	Hampton University *	9

* Denotes Historically Black College or University.

SOURCE: Tabulations by National Science Foundation/Division of Science Resources Studies; data from U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Completions Survey.

Appendix table 2-13. Top 50 institutions awarding science and engineering bachelor's degrees to Hispanics, by institution: 1996

Rank	Academic institution	Number of degrees
	Total of all academic institutions.....	23,791
1	University of PR, Mayaguez Campus*	1,080
2	Florida International University*	600
3	University of California-Los Angeles.....	576
4	University of PR, Rio Piedras Campus*	541
5	University of Texas at Austin.....	410
6	University of California-Berkeley.....	379
7	Texas A&M University, Main Campus.....	300
8	University of Texas at San Antonio.....	297
9	University of Texas-Pan American.....	295
10	Universidad Politecnica de Puerto Rico*	288
11	University of Texas at El Paso.....	282
12	Inter American U of PR, Metropolitan Campus*	259
13	Inter American U of PR, San German Campus*	258
14	University of California-San Diego.....	255
15	University of California-Santa Barbara.....	251
16	The Pontifical Catholic Univ. of Puerto Rico*	248
17	University of Arizona.....	235
18	University of California-Davis.....	233
19	San Diego State University.....	219
20	California State University-Los Angeles*	211
21	CUNY Hunter College.....	201
22	California State Polytechnic U-San Luis Obispo.....	198
23	University of California-Irvine.....	198
24	University of New Mexico, All Campuses*	197
25	CUNY Herbert H Lehman College*	196
26	California State University-Northridge.....	195
27	University of Florida.....	192
28	California State University-Long Beach.....	188
29	New Mexico State University, All Campuses*	180
30	Texas A&M University-Kingsville.....	173
31	Rutgers, the State Univ of NJ, New Brunswick.....	167
32	University of Miami*	166
33	University of PR, Cayey University College*	165
34	California State University-Fresno*	162
35	University of South Florida.....	154
36	University of Southern California.....	154
37	University of California-Santa Cruz.....	153
38	Arizona State University, Main Campus.....	145
39	San Jose State University.....	144
40	University of Houston.....	141
41	California State University-Fullerton.....	139
42	Inter American U of PR, Arecibo Campus*	136
43	California State Polytechnic University, Pomona.....	135
44	University of Illinois at Urbana-Champaign.....	132
45	University of Central Florida.....	130
46	CUNY City College*	126
47	Stanford University.....	122
48	University of Michigan at Ann Arbor.....	121
49	University of Washington-Seattle.....	117
50	Florida State University.....	114

* Denotes Hispanic Serving Institution.

SOURCE: Tabulations by the National Science Foundation/Division of Science Resources Studies; data from U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Completions Survey.

**Appendix table 2-14. Science and engineering bachelor's degrees awarded to Hispanics by institutions
in Puerto Rico, by field: 1990–96**

Field	1990	1991	1992	1993	1994	1995	1996
Degrees awarded, all institutions							
Total science and engineering.....	13,918	15,351	17,391	18,422	20,529	22,190	23,791
Engineering.....	2,511	2,566	2,733	2,961	3,143	3,651	3,731
Physical sciences ¹	522	533	546	599	733	800	872
Math and computer sciences.....	1,498	1,695	1,655	1,566	1,678	1,843	1,865
Agricultural sciences.....	218	213	214	217	336	386	506
Biological sciences.....	2,119	2,264	2,477	2,652	2,901	3,090	3,521
Psychology.....	2,405	2,746	3,247	3,587	3,990	4,543	5,036
Social sciences.....	4,645	5,334	6,519	6,860	7,748	7,877	8,260
Degrees to Hispanics from institutions in Puerto Rico as a percentage of total degrees awarded to Hispanics							
Total science and engineering.....	21.4	19.2	17.3	16.3	15.6	15.8	15.2
Engineering.....	24.9	21.6	25.1	23.5	23.6	27.1	24.5
Physical sciences ¹	35.2	28.9	31.5	28.7	31.0	38.9	37.2
Math and computer sciences.....	22.0	25.7	19.9	18.8	17.0	15.4	16.2
Agricultural sciences.....	32.6	28.2	0.0	0.0	16.1	13.5	13.4
Biological sciences.....	40.7	35.2	33.8	31.4	27.9	26.3	27.4
Psychology.....	17.3	15.6	15.0	13.8	12.5	11.0	10.0
Social sciences.....	10.7	9.8	7.6	7.4	7.6	7.0	6.6

¹ In all tables showing degrees before 1995 by race/ethnicity, "Physical science" for all years includes earth, atmospheric, and ocean sciences, as well as physics, astronomy, and chemistry. See NOTE.

NOTE: Data on race/ethnicity of degree recipients were collected on broad fields of study only until 1994; therefore, these trend data could not be adjusted to the exact field taxonomies used by NSF.

SOURCE: Tabulations by National Science Foundation/Division of Science Resources Studies; data from U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Completions Survey.

Appendix table 2-15. Top 15 states in which American Indians/Alaskan Natives earned science and engineering bachelor's and associate's degrees: 1990-96

Rank 1996	State	1990	1991	1992	1993	1994	1995	1996
Bachelor's Degrees:								
	Total, United States...	1,271	1,344	1,561	1,818	2,004	2,126	2,268
1	California...	264	269	317	391	416	412	430
2	Oklahoma...	113	119	149	179	227	236	246
3	Colorado...	37	52	49	71	80	87	112
4	North Carolina...	55	72	79	93	87	84	99
5	Texas...	47	66	55	64	81	96	96
6	Washington...	49	54	64	81	81	79	95
7	Arizona...	45	35	52	61	48	83	87
8	New York...	43	66	78	77	73	99	87
9	Michigan...	46	53	55	68	59	75	85
10	Oregon...	33	37	41	46	59	52	60
11	New Mexico...	36	36	34	28	55	50	55
12	Florida...	14	19	18	26	38	35	49
13	Montana...	22	20	24	20	25	35	47
14	Minnesota...	30	41	43	37	45	42	39
15	Wisconsin...	24	32	30	53	51	45	39
Associate's Degrees:								
	Total, United States...	202	257	246	310	417	410	464
1	Oklahoma...	34	51	52	68	103	85	95
2	California...	46	47	53	59	56	73	80
3	Arizona...	22	27	34	57	66	50	62
4	Montana...	17	12	18	18	24	19	41
5	South Dakota...	14	16	4	8	25	26	32
6	Kansas...	8	15	13	15	19	24	18
7	New Mexico...	10	14	7	8	20	18	16
8	New York...	5	7	6	8	8	3	13
9	Wyoming...	1	0	2	0	3	2	13
10	Michigan...	6	8	6	9	20	18	12
11	Texas...	1	4	6	7	10	18	12
12	Nebraska...	0	0	0	1	3	3	8
13	Ohio...	2	3	3	8	6	6	6
14	Virginia...	0	2	1	1	2	2	6
15	Utah...	0	1	2	5	0	3	5

SOURCE: Tabulations by the National Science Foundation/Division of Science Resources Studies; data from U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Completions Survey.

Women, Minorities, and Persons With Disabilities in Science and Engineering: 2000

**Appendix table 2-16. Bachelor's degrees awarded to American Indians/Alaskan Natives
by Tribal Institutions: 1990–96**

Academic discipline	1990	1991	1992	1993	1994	1995	1996
Bachelor's degrees all academic institutions:							
Total science and engineering.....	1,271	1,344	1,561	1,819	2,004	2,126	2,268
Engineering.....	146	158	182	176	218	221	243
Physical sciences ¹	73	69	63	93	83	98	104
Math and computer science.....	129	123	125	136	137	168	142
Agricultural sciences.....	59	53	60	64	109	124	139
Biological sciences.....	130	176	181	211	246	285	316
Psychology.....	211	235	311	335	394	407	470
Social sciences.....	523	530	639	804	817	823	854
Bachelor's degrees, Tribal Institutions:							
Total science and engineering.....	5	5	0	0	7	7	14
Agricultural sciences.....	0	0	0	0	0	0	2
Social sciences.....	5	5	0	0	7	7	12

¹ In all tables showing degrees before 1995 by race/ethnicity, "Physical science" for all years includes earth, atmospheric, and ocean sciences, as well as physics, astronomy, and chemistry. See NOTE.

NOTE: Data on race/ethnicity of degree recipients were collected on broad fields of study only until 1994; therefore, these trend data could not be adjusted to the exact field taxonomies used by NSF.

SOURCE: Tabulations by National Science Foundation/Division of Science Resources Studies; data from U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Completions Survey.

**Appendix table 2-17. Associate's degrees awarded to American Indians/Alaskan Natives
by Tribal Institutions: 1990–96**

Academic discipline	1990	1991	1992	1993	1994	1995	1996
Associate's degrees, all academic institutions:							
Total science and engineering.....	434	551	451	568	735	727	781
Engineering.....	12	21	14	8	18	21	11
Physical sciences ¹	4	7	5	7	20	23	26
Math and computer science.....	84	91	69	116	116	124	136
Agricultural sciences.....	21	37	38	41	69	60	48
Biological sciences.....	13	22	15	25	36	40	42
Psychology.....	9	16	31	18	38	35	42
Social sciences.....	59	63	75	100	122	107	159
Science and engineering technologies.....	170	242	178	214	269	272	245
Interdisciplinary or other sciences.....	62	52	26	39	47	45	72
Associate's degrees, Tribal Institutions:							
Total science and engineering.....	58	67	66	93	134	135	171
Engineering.....	0	0	2	0	0	0	0
Physical sciences ¹	1	0	0	0	0	0	4
Math and computer science.....	29	29	13	25	20	29	42
Agricultural sciences.....	1	4	14	15	25	24	19
Biological sciences.....	2	2	4	4	8	7	4
Psychology.....	0	0	0	0	4	3	2
Social sciences.....	24	26	29	45	67	61	83
Science and engineering technologies.....	1	6	0	0	2	2	3
Interdisciplinary or other sciences.....	0	0	4	4	8	9	14

¹ In all tables showing degrees before 1995 by race/ethnicity, "Physical science" for all years includes earth, atmospheric, and ocean sciences, as well as physics, astronomy, and chemistry. See NOTE.

NOTE: Data on race/ethnicity of degree recipients were collected on broad fields of study only until 1994; therefore, these trend data could not be adjusted to the exact field taxonomies used by NSF.

SOURCE: Tabulations by National Science Foundation/Division of Science Resources Studies; data from U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Completions Survey.

Appendix table 3-1. Science and engineering graduate students, by field: 1980–97

Field	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Science and engineering, total...	325,649	332,041	338,916	347,017	349,698	358,059	368,104	373,341	375,277	382,747	397,135	412,697	430,644	435,886	431,251	422,525	415,363	407,644
Physical sciences...	26,934	27,357	28,186	29,453	30,056	30,981	32,246	32,727	32,962	33,616	34,075	34,710	35,348	35,318	34,449	33,417	32,355	31,108
Astronomy...	628	597	632	618	639	671	689	719	731	789	810	829	869	880	973	912	874	778
Chemistry...	16,221	16,348	17,015	17,802	17,755	18,305	18,744	18,827	18,579	18,828	19,118	19,407	19,929	20,131	19,797	19,594	19,358	18,794
Physics...	9,898	10,141	10,300	10,806	11,331	11,672	12,437	12,807	13,308	13,657	13,813	14,081	14,122	13,841	13,162	12,425	11,728	11,147
Other physical sciences...	187	271	239	227	331	333	376	374	344	342	334	393	428	466	517	486	395	389
Earth, atmospheric, and ocean sciences...	14,051	14,266	15,020	15,453	15,505	15,420	15,066	14,371	13,867	13,643	13,984	14,480	15,347	15,805	16,042	15,805	15,280	14,644
Mathematics and statistics...	15,311	15,881	17,157	17,358	17,443	17,563	17,949	18,508	19,077	19,247	19,774	19,952	20,355	20,000	19,579	18,509	18,015	16,759
Computer science...	13,578	16,437	19,812	23,333	25,526	29,769	31,349	32,051	32,227	32,482	34,257	34,610	36,293	36,189	34,128	33,432	34,592	36,010
Agricultural sciences...	12,452	12,355	12,583	12,429	12,226	11,561	11,458	11,118	11,135	11,190	11,316	11,506	11,827	11,914	12,199	12,367	11,914	11,810
Biological sciences...	47,596	46,639	45,970	45,644	45,763	46,112	46,764	46,747	47,565	48,852	49,989	51,778	54,177	56,452	58,143	58,706	58,128	57,135
Psychology...	40,610	40,666	40,073	40,905	40,931	40,721	41,241	42,612	43,963	45,528	48,167	51,343	53,484	54,557	54,554	53,641	53,209	53,142
Social sciences...	80,805	78,885	76,428	71,323	69,536	69,941	70,157	71,254	71,652	74,146	77,948	80,742	85,778	88,793	89,134	89,449	88,647	86,028
Economics...	15,401	15,507	15,896	15,224	14,786	14,698	14,351	14,201	14,295	14,415	14,599	15,071	15,774	15,629	15,202	15,011	14,197	13,112
Political science and public administration...	30,375	30,026	29,232	27,417	25,570	26,621	27,091	27,429	27,723	29,194	30,582	31,707	33,797	35,076	34,317	34,298	33,252	32,039
Sociology...	9,228	8,947	8,412	8,149	7,836	7,620	7,553	7,968	8,077	8,393	8,965	9,292	9,990	10,360	10,485	10,505	18,150	18,198
Anthropology...	6,322	6,118	5,948	5,644	5,590	5,631	5,805	5,835	5,945	6,128	6,479	6,731	7,123	7,361	7,665	7,693	7,773	7,558
Linguistics...	3,007	3,139	2,803	3,022	3,160	3,055	3,109	3,282	3,243	3,286	3,404	3,425	3,277	3,321	3,279	3,194	3,156	3,008
Other social sciences...	16,472	15,148	14,137	11,867	12,594	12,316	12,248	12,539	12,369	12,730	13,919	14,516	15,817	17,046	18,186	18,748	32,715	33,444
Engineering...	74,312	79,555	83,687	91,119	92,712	95,991	101,874	103,953	102,829	104,043	107,625	113,576	118,035	116,858	113,023	107,199	103,223	101,008
Aerospace engineering...	1,737	1,883	1,941	2,305	2,340	2,538	2,804	3,015	3,223	3,524	3,934	4,120	4,036	3,940	3,715	3,343	3,208	3,083
Chemical engineering...	6,015	6,496	7,189	7,563	7,373	7,150	7,012	7,111	6,618	6,460	6,735	7,127	7,397	7,516	7,608	7,424	7,373	7,247
Civil engineering...	13,097	14,089	14,122	14,910	15,192	14,902	14,976	14,682	14,811	14,909	15,542	17,398	19,572	19,583	19,925	19,218	18,528	17,033
Electrical engineering...	19,132	20,113	21,927	25,295	26,388	28,203	29,969	31,399	32,035	33,257	33,722	35,182	36,460	35,314	33,050	30,747	29,736	30,617
Mechanical engineering...	9,888	10,618	11,467	12,911	13,855	14,157	15,713	16,366	16,151	16,265	16,879	17,730	18,637	18,477	17,761	16,363	15,509	15,044
Materials engineering...	2,910	3,125	3,124	3,447	3,657	3,943	4,208	4,366	4,337	4,594	4,941	5,160	5,512	5,363	5,191	4,920	4,713	4,649
Industrial engineering...	9,698	9,737	9,577	9,247	9,282	10,499	11,529	12,220	11,393	11,094	11,248	12,676	13,525	13,596	13,661	13,143	12,399	11,725
Other engineering...	11,835	13,494	14,340	15,441	14,625	14,599	15,663	14,794	14,261	13,940	14,624	14,183	12,896	13,069	12,112	12,041	11,757	11,610

SOURCE: National Science Foundation/Division of Science Resources Studies, Survey of Graduate Students and Postdoctorates in Science and Engineering.

Appendix table 3-2. Female science and engineering graduate students, by field: 1980–97

Field	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Science and engineering, total.....	94,396	99,848	103,576	106,519	107,546	110,638	114,418	117,192	121,272	125,898	133,741	140,852	150,247	156,597	159,131	160,198	161,734	162,029
Physical sciences.....	4,596	5,009	5,419	5,877	6,158	6,507	6,862	7,114	7,497	7,801	8,068	8,564	8,844	9,202	9,159	9,090	9,052	8,851
Astronomy.....	82	91	101	92	98	108	121	118	140	140	165	172	186	198	223	223	227	208
Chemistry.....	3,503	3,803	4,158	4,512	4,639	4,789	5,026	5,178	5,467	5,670	5,868	6,262	6,562	6,852	6,841	6,835	6,847	6,728
Physics.....	948	1,016	1,067	1,201	1,291	1,497	1,576	1,673	1,751	1,868	1,913	1,980	1,943	1,976	1,908	1,835	1,809	1,744
Other physical sciences.....	63	99	93	72	130	113	139	145	139	123	122	150	153	176	187	197	169	171
Earth, atmospheric, and ocean sciences.....	3,207	3,418	3,723	3,901	3,873	3,927	3,947	3,779	3,805	3,858	4,119	4,455	4,858	5,060	5,353	5,469	5,494	5,457
Mathematics and statistics.....	4,064	4,481	5,078	5,200	5,168	5,354	5,479	5,596	5,776	5,985	6,199	6,298	6,549	6,638	6,535	6,261	6,221	5,884
Computer science.....	3,087	4,209	5,446	6,614	6,873	7,561	7,852	8,015	8,194	7,988	8,199	8,270	8,455	8,422	8,085	8,126	8,790	9,877
Agricultural sciences.....	2,858	2,822	3,085	3,139	3,138	2,991	2,953	2,952	3,097	3,145	3,335	3,567	3,768	4,088	4,288	4,432	4,412	4,533
Biological sciences.....	18,301	18,647	19,173	19,351	19,517	19,904	20,471	20,433	21,261	22,234	23,042	24,135	25,475	27,053	28,155	28,830	28,768	28,622
Psychology.....	21,583	22,766	23,097	24,257	24,751	25,124	25,864	26,929	28,461	29,855	32,345	34,787	36,834	37,990	38,138	37,764	37,806	37,643
Social sciences.....	30,361	30,750	29,780	28,373	27,771	28,190	28,625	29,411	30,057	31,432	33,762	35,061	38,231	40,452	41,369	42,212	42,939	42,447
Economics.....	3,457	3,645	3,925	3,621	3,508	3,564	3,509	3,518	3,645	3,824	3,973	4,195	4,514	4,606	4,541	4,659	4,493	4,194
Political science and public administration.....	10,680	11,190	10,953	10,493	9,581	10,345	10,677	10,866	11,393	12,170	13,157	13,736	14,971	15,756	15,584	15,950	15,632	15,384
Sociology.....	4,594	4,615	4,473	4,299	4,188	4,037	4,099	4,352	4,387	4,565	4,960	5,101	5,684	6,080	6,331	6,337	6,326	6,402
Anthropology.....	3,313	3,327	3,271	3,206	3,151	3,121	3,345	3,353	3,446	3,580	3,791	3,953	4,247	4,392	4,593	4,553	4,686	4,500
Linguistics.....	1,682	1,790	1,623	1,805	1,901	1,857	1,857	1,977	1,947	1,952	2,006	1,913	1,996	2,020	2,066	2,000	2,023	1,974
Other social sciences.....	6,635	6,183	5,535	4,949	5,442	5,266	5,138	5,345	5,239	5,341	5,875	6,163	6,819	7,598	8,254	8,713	9,779	9,993
Engineering.....	6,339	7,746	8,775	9,807	10,297	11,080	12,365	12,963	13,124	13,600	14,672	15,715	17,233	17,692	18,049	18,014	18,252	18,715
Aerospace engineering.....	74	67	110	123	132	163	200	224	227	243	289	327	348	357	358	351	352	371
Chemical engineering.....	679	778	901	1,016	972	1,004	1,039	1,154	1,075	1,029	1,146	1,257	1,394	1,499	1,526	1,561	1,642	1,709
Civil engineering.....	1,365	1,574	1,749	1,859	2,027	2,147	2,103	2,294	2,435	2,689	3,102	3,654	3,858	4,211	4,232	4,300	4,159	
Electrical engineering.....	983	1,276	1,551	2,068	2,213	2,435	2,908	3,098	3,278	3,515	3,715	3,871	4,293	4,322	4,104	4,095	4,129	4,459
Mechanical engineering.....	534	631	719	805	956	1,011	1,159	1,296	1,402	1,398	1,442	1,511	1,698	1,774	1,823	1,677	1,636	1,779
Materials engineering.....	303	390	420	448	468	603	675	729	756	810	893	987	1,069	1,027	1,069	1,059	1,060	1,094
Industrial engineering.....	1,355	1,543	1,619	1,518	1,608	1,780	2,095	2,244	2,093	2,110	2,137	2,355	2,655	2,593	2,795	2,755	2,714	2,610
Other engineering.....	1,046	1,487	1,706	1,970	1,921	1,937	2,142	2,115	1,999	2,060	2,361	2,305	2,122	2,262	2,163	2,284	2,419	2,534

SOURCE: National Science Foundation/Division of Science Resources Studies, Survey of Graduate Students and Postdoctorates in Science and Engineering.

Appendix table 3-3. Male science and engineering graduate students, by field: 1980–97

Field	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Science and engineering, total.....	231,253	232,193	235,340	240,498	242,152	247,421	253,686	256,149	254,005	256,849	263,394	271,845	280,397	279,289	272,120	262,341	253,629	245,615
Physical sciences.....	22,338	22,348	22,767	23,576	23,898	24,474	25,384	25,613	25,465	25,815	26,007	26,146	26,504	26,116	25,290	24,327	23,303	22,257
Astronomy.....	546	506	531	526	541	563	568	601	591	649	645	657	683	682	750	689	647	570
Chemistry.....	12,718	12,545	12,857	13,290	13,116	13,516	13,718	13,649	13,112	13,158	13,250	13,145	13,367	13,279	12,956	12,759	12,511	12,066
Physics.....	8,950	9,125	9,233	9,605	10,040	10,175	10,861	11,134	11,557	11,789	11,900	12,101	12,179	11,865	11,254	10,590	9,919	9,403
Other physical sciences.....	124	172	146	155	201	220	237	229	205	219	212	243	275	290	330	289	226	218
Earth, atmospheric, and ocean sciences.....	10,844	10,848	11,297	11,552	11,632	11,493	11,119	10,592	10,062	9,785	9,865	10,025	10,489	10,745	10,689	10,336	9,786	9,187
Mathematics and statistics.....	11,247	11,400	12,079	12,158	12,275	12,209	12,470	12,912	13,301	13,262	13,575	13,654	13,806	13,362	13,044	12,248	11,794	10,875
Computer science.....	10,491	12,228	14,366	16,719	18,653	22,208	23,497	24,036	24,033	24,494	26,058	26,340	27,838	27,767	26,043	25,306	25,802	26,133
Agricultural sciences.....	9,594	9,533	9,498	9,290	9,088	8,570	8,505	8,166	8,038	8,045	7,981	7,939	8,059	7,826	7,911	7,935	7,502	7,277
Biological sciences.....	29,295	27,992	26,797	26,293	26,246	26,208	26,293	26,314	26,304	26,618	26,947	27,643	28,702	29,399	29,988	29,890	29,360	28,513
Psychology.....	19,027	17,900	16,976	16,648	16,180	15,597	15,377	15,683	15,502	15,673	15,822	16,556	16,650	16,567	16,416	15,877	15,403	15,499
Social sciences.....	50,444	48,135	46,648	42,950	41,765	41,751	41,532	41,843	41,595	42,714	44,186	45,681	47,547	48,341	47,765	47,237	45,708	43,581
Economics.....	11,944	11,862	11,971	11,603	11,278	11,134	10,842	10,683	10,650	10,591	10,626	10,876	11,260	11,023	10,661	10,352	9,704	8,918
Political science and public administration.....	19,695	18,836	18,279	16,924	15,989	16,276	16,414	16,563	16,330	17,024	17,425	17,971	18,826	19,320	18,733	18,348	17,620	16,655
Sociology.....	4,634	4,332	3,939	3,850	3,648	3,583	3,454	3,616	3,690	3,828	4,005	4,191	4,306	4,280	4,154	4,168	4,022	3,969
Anthropology.....	3,009	2,791	2,677	2,438	2,439	2,510	2,460	2,482	2,499	2,548	2,688	2,778	2,876	2,969	3,072	3,140	3,087	3,058
Linguistics.....	1,325	1,349	1,180	1,217	1,259	1,198	1,252	1,305	1,296	1,334	1,398	1,512	1,281	1,301	1,213	1,194	1,133	1,034
Other social sciences.....	9,837	8,965	8,602	6,918	7,152	7,050	7,110	7,194	7,130	7,389	8,044	8,353	8,998	9,448	9,932	10,035	10,142	9,947
Engineering.....	67,973	71,809	74,912	81,312	82,415	84,911	89,509	90,990	89,705	90,443	92,953	97,861	100,802	99,166	94,974	89,185	84,971	82,293
Aerospace engineering.....	1,663	1,816	1,831	2,182	2,208	2,375	2,604	2,791	2,996	3,281	3,645	3,793	3,688	3,583	3,357	2,992	2,856	2,712
Chemical engineering.....	5,336	5,718	6,288	6,547	6,401	6,146	5,973	5,957	5,543	5,431	5,589	5,870	6,003	6,017	6,082	5,863	5,731	5,538
Civil engineering.....	11,732	12,515	12,373	13,051	13,165	12,755	12,829	12,579	12,517	12,474	12,853	14,296	15,918	15,725	15,714	14,986	14,228	12,874
Electrical engineering.....	18,149	18,837	20,376	23,227	24,175	25,768	27,061	28,301	28,757	29,742	30,007	31,311	32,167	30,992	28,946	26,652	25,607	26,158
Mechanical engineering.....	9,354	9,987	10,748	12,106	12,899	13,146	14,554	15,070	14,749	14,867	15,437	16,219	16,939	16,703	15,938	14,686	13,873	13,265
Materials engineering.....	2,607	2,735	2,704	2,999	3,189	3,340	3,533	3,637	3,581	3,784	4,048	4,173	4,443	4,336	4,122	3,861	3,653	3,555
Industrial engineering.....	8,343	8,194	7,958	7,729	7,674	8,719	9,434	9,976	9,300	8,984	9,111	10,321	10,870	11,003	10,866	10,388	9,685	9,115
Other engineering.....	10,789	12,007	12,634	13,471	12,704	12,662	13,521	12,679	12,262	11,880	12,263	11,878	10,774	10,807	9,949	9,757	9,338	29,189

SOURCE: National Science Foundation/Division of Science Resources Studies, Survey of Graduate Students and Postdoctorates in Science and Engineering.

Appendix table 3-5. Science and engineering graduate students, by field, citizenship, and race/ethnicity: 1982-97

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Field	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Science and engineering																
Total	338,916	347,017	349,698	358,059	368,104	373,341	375,277	382,747	397,135	412,697	430,644	435,886	431,251	422,555	415,363	407,644
Temporary residents	64,823	70,217	72,109	76,806	83,975	88,790	93,615	98,080	102,817	108,634	109,462	105,717	102,156	98,538	98,154	98,809
U.S. citizens and permanent residents	274,093	276,800	277,589	281,253	284,129	284,551	281,662	284,667	294,318	304,063	321,182	330,169	329,095	324,017	317,209	308,835
White, non-Hispanic	215,264	224,653	223,009	223,628	227,533	228,796	229,027	229,676	238,472	243,602	253,435	256,859	255,719	245,889	238,077	227,936
Asian/Pacific Islander	8,170	9,387	10,211	12,001	12,774	14,564	15,188	15,692	17,155	18,136	21,752	24,059	26,474	25,901	25,947	26,078
Black, non-Hispanic	10,388	10,941	10,679	10,451	10,460	10,426	11,191	11,775	12,774	13,691	15,445	17,118	17,611	18,283	19,071	19,363
Hispanic	7,724	8,812	8,683	8,614	8,658	8,823	9,098	9,436	10,159	11,045	12,246	13,381	13,281	14,117	14,638	14,988
American Indian/ Alaskan Native	909	911	830	737	743	782	918	860	1,054	1,120	1,243	1,309	1,383	1,516	1,539	1,599
Other or unknown race/ethnicity	31,638	22,096	24,177	25,822	23,961	21,160	16,240	17,228	14,704	16,469	17,061	17,443	14,627	18,311	17,937	18,871
Sciences																
Total	255,229	255,898	256,986	262,068	266,230	269,388	272,448	278,704	289,510	299,121	312,609	319,028	318,228	315,356	312,140	306,636
Temporary residents	39,765	42,724	44,206	47,984	52,030	55,413	58,389	61,383	64,618	67,291	68,022	66,450	65,172	63,071	63,125	62,387
U.S. citizens and permanent residents	215,464	213,174	212,780	214,084	214,200	213,975	214,059	217,321	224,892	231,830	244,587	252,578	253,056	252,285	249,015	244,249
White, non-Hispanic	172,017	176,050	173,758	173,487	174,607	174,995	176,698	178,183	185,265	188,818	196,039	199,419	199,699	193,933	188,965	181,919
Asian/Pacific Islander	5,427	5,981	6,399	7,196	7,660	8,715	9,278	9,681	10,468	11,020	13,260	15,072	16,697	16,893	17,510	17,924
Black, non-Hispanic	9,258	9,563	9,234	9,064	9,008	9,010	9,691	10,159	10,988	11,666	13,071	14,559	14,827	15,427	16,176	16,489
Hispanic	6,629	7,371	7,192	7,133	7,056	7,093	7,379	7,729	8,273	8,921	9,783	10,687	10,420	11,309	11,703	12,177
American Indian/ Alaskan Native	738	731	638	615	613	659	775	738	902	935	1,066	1,098	1,141	1,285	1,305	1,361
Other or unknown race/ethnicity	21,395	13,478	15,559	16,589	15,256	13,503	10,238	10,831	8,996	10,470	11,368	11,743	10,272	13,438	13,356	14,379
Physical sciences																
Total	28,186	29,453	30,056	30,981	32,246	32,727	32,962	33,616	34,075	34,710	35,348	35,318	34,449	33,417	32,355	31,108
Temporary residents	6,914	7,624	8,005	8,941	10,028	10,628	11,072	11,773	12,466	12,725	12,805	12,252	11,709	11,425	11,196	10,914
U.S. citizens and permanent residents	21,272	21,829	22,051	22,040	22,218	22,099	21,890	21,843	21,609	21,985	22,543	23,066	22,740	21,992	21,159	20,194
White, non-Hispanic	17,677	18,647	18,587	18,324	18,553	18,087	18,282	18,318	18,433	18,402	18,527	18,582	18,422	17,487	16,762	15,749
Asian/Pacific Islander	728	785	933	937	910	1,047	1,253	1,175	1,200	1,429	1,615	1,973	1,923	1,780	1,743	1,638
Black, non-Hispanic	553	575	596	535	524	536	569	633	654	699	807	843	856	897	986	952
Hispanic	496	563	535	599	629	591	624	680	642	649	680	747	675	732	743	784
American Indian/ Alaskan Native	49	45	77	35	48	46	52	44	63	62	67	81	67	76	60	70
Other or unknown race/ethnicity	1,769	1,214	1,323	1,610	1,554	1,792	1,110	993	617	744	847	840	797	1,020	865	1,001

See explanatory information and SOURCES at end of table.

Appendix table 3-5. Science and engineering graduate students, by field, citizenship, and race/ethnicity: 1982-97

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Field	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	
Earth, atmospheric, and ocean sciences																	
Total....	15,020	15,453	15,505	15,420	15,066	14,371	13,867	13,643	13,984	14,480	15,347	15,805	16,042	15,805	15,280	14,644	
Temporary residents....	1,863	1,847	1,777	1,866	2,070	2,190	2,408	2,575	2,675	2,897	3,004	3,010	3,266	2,947	2,767	2,516	
U.S. citizens and																	
permanent residents....	13,157	13,606	13,728	13,554	12,996	12,181	11,459	11,068	11,309	11,583	12,343	12,795	12,776	12,858	12,513	12,128	
White, non-Hispanic....	11,261	12,247	11,935	11,760	11,587	10,924	10,415	10,137	10,375	10,531	10,893	11,145	11,351	11,322	10,956	10,486	
Asian/Pacific Islander....	208	240	189	194	153	179	209	207	258	267	383	469	454	425	411	417	
Black, non-Hispanic....	103	114	115	127	98	93	107	95	123	141	202	227	203	219	223	206	
Hispanic....	191	224	261	238	237	227	210	209	241	250	308	371	344	366	381	407	
American Indian/																	
Alaskan Native....	21	27	22	23	19	18	27	26	30	29	35	46	49	53	65	82	
Other or unknown																	
race/ethnicity....	1,373	754	1,206	1,212	902	740	491	394	282	365	522	537	375	473	477	530	
Mathematical sciences																	
Total....	17,157	17,358	17,443	17,563	17,949	18,508	19,077	19,247	19,774	19,952	20,355	20,000	19,579	18,509	18,015	16,759	
Temporary residents....	4,526	4,953	5,192	5,345	5,810	6,129	6,425	6,683	6,564	6,634	6,477	6,134	6,063	5,809	5,761	5,548	
U.S. citizens and																	
permanent residents....	12,631	12,405	12,251	12,218	12,139	12,379	12,652	12,564	13,210	13,318	13,878	13,866	13,516	12,700	12,254	11,211	
White, non-Hispanic....	10,127	10,259	9,944	9,787	9,528	9,650	10,133	10,064	10,605	10,457	10,851	10,572	10,496	9,659	9,201	8,382	
Asian/Pacific Islander....	490	564	565	623	706	769	756	703	822	866	963	1,020	1,208	1,121	1,225	1,052	
Black, non-Hispanic....	356	403	393	409	449	441	422	463	511	524	579	710	673	689	711	657	
Hispanic....	290	330	292	262	270	266	328	305	351	349	376	415	369	400	425	426	
American Indian/																	
Alaskan Native....	41	31	22	22	31	48	32	34	20	20	27	32	36	70	41	43	
Other or unknown																	
race/ethnicity....	1,327	818	1,035	1,115	1,155	1,205	981	995	901	1,102	1,082	1,117	734	761	651	651	
Computer sciences																	
Total....	19,812	23,333	25,526	29,769	31,349	32,051	32,227	32,482	34,257	34,610	36,293	36,189	34,128	33,432	34,592	36,010	
Temporary residents....	4,373	5,453	6,260	7,497	8,058	8,777	8,984	9,694	10,906	11,622	12,130	11,920	11,064	10,794	11,855	12,808	
U.S. citizens and																	
permanent residents....	15,439	17,880	19,266	22,272	23,291	23,274	23,243	22,788	23,351	22,988	24,163	24,269	23,064	22,638	22,737	23,202	
White, non-Hispanic....	11,574	13,543	14,081	15,724	16,525	17,156	17,346	16,496	17,292	16,464	16,893	16,760	15,709	14,739	14,443	14,050	
Asian/Pacific Islander....	890	1,102	1,251	1,868	2,064	2,466	2,682	2,727	2,888	2,858	3,399	3,566	4,056	4,053	4,269	4,702	
Black, non-Hispanic....	528	568	567	622	702	769	839	848	985	1,093	1,108	1,168	1,182	1,155	1,278	1,303	
Hispanic....	249	285	293	488	453	551	516	542	565	631	706	696	633	664	701	726	
American Indian/																	
Alaskan Native....	31	22	49	57	21	28	39	40	44	42	72	68	43	55	53	60	
Other or unknown																	
race/ethnicity....	2,167	2,360	3,025	3,513	3,526	2,304	1,821	2,135	1,577	1,900	1,985	2,011	1,441	1,972	1,993	2,361	

See explanatory information and SOURCES at end of table.

Appendix table 3-5. Science and engineering graduate students, by field, citizenship, and race/ethnicity: 1982-97

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Field	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Social sciences																
Total...	76,428	71,323	69,536	69,941	70,157	71,254	71,652	74,146	77,948	80,742	85,778	88,793	89,134	89,449	88,647	86,028
Temporary residents...	12,474	12,653	12,572	13,320	13,971	14,558	15,235	15,316	15,487	15,721	15,676	15,190	14,759	14,704	15,135	14,705
U.S. citizens and																
permanent residents...	63,954	58,670	56,964	56,621	56,186	56,696	56,417	58,830	62,461	65,021	70,102	73,603	74,375	74,745	73,512	71,323
White, non-Hispanic...	47,794	45,189	43,509	43,252	43,685	44,315	44,562	46,286	49,386	51,435	54,541	56,873	57,298	56,093	54,217	51,767
Asian/Pacific Islander...	1,411	1,366	1,468	1,431	1,509	1,708	1,615	1,830	1,868	1,989	2,585	2,854	3,244	3,343	3,341	3,443
Black, non-Hispanic...	4,804	4,733	4,366	4,261	4,226	4,189	4,513	4,694	5,082	5,292	5,915	6,355	6,436	6,935	7,245	7,330
Hispanic...	2,914	3,021	2,810	2,679	2,508	2,540	2,585	2,745	2,822	3,024	3,604	3,939	4,000	4,237	4,237	4,367
American Indian/																
Alaskan Native...	341	319	245	233	231	248	311	304	348	370	395	391	409	437	478	506
Other or unknown																
race/ethnicity...	6,690	4,042	4,566	4,765	4,027	3,696	2,831	2,971	2,955	2,911	3,062	3,191	2,988	3,700	3,994	3,910
Engineering																
Total...	83,687	91,119	92,712	95,991	101,874	103,953	102,829	104,043	107,625	113,576	118,035	116,858	113,023	107,199	103,223	101,008
Temporary residents...	25,058	27,493	27,903	28,822	31,945	33,377	35,226	36,697	38,199	41,343	41,440	39,267	36,984	35,467	35,029	36,422
U.S. citizens and																
permanent residents...	58,629	63,626	64,809	67,169	69,929	70,576	67,603	67,346	69,426	72,233	76,595	77,591	76,039	71,732	68,194	64,586
White, non-Hispanic...	43,247	48,603	49,251	50,141	52,926	53,801	52,329	51,493	53,207	54,784	57,396	57,440	56,020	51,956	49,112	46,017
Asian/Pacific Islander...	2,743	3,406	3,812	4,805	5,114	5,849	5,910	6,011	6,687	7,116	8,492	8,987	9,777	9,008	8,437	8,154
Black, non-Hispanic...	1,130	1,378	1,445	1,387	1,452	1,416	1,500	1,616	1,786	2,025	2,374	2,559	2,784	2,856	2,895	2,874
Hispanic...	1,095	1,441	1,491	1,481	1,602	1,730	1,719	1,707	1,886	2,124	2,463	2,694	2,861	2,808	2,935	2,811
American Indian/																
Alaskan Native...	171	180	192	122	130	123	143	122	152	185	177	211	242	231	234	238
Other or unknown																
race/ethnicity...	10,243	8,618	8,618	9,233	8,705	7,657	6,002	6,397	5,708	5,999	5,693	5,700	4,355	4,873	4,581	4,492

SOURCE: National Science Foundation/Division of Science Resources Studies, Survey of Graduate Students and Postdoctorates in Science and Engineering.

Women, Minorities, and Persons With Disabilities in Science and Engineering: 2000

Appendix table 3-6. Science and engineering graduate students in California, by citizenship, racial/ethnic background of U.S. citizens and permanent residents, and Carnegie classification by type of control: 1990–97

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Carnegie classification, citizenship and race/ethnicity	1990	1991	1992	1993	1994	1995	1996	1997
Total, all institutions								
All institutions:								
Total...	52,055	53,047	54,441	54,281	52,780	52,000	51,299	51,007
Total U.S. citizens and permanent residents...	40,767	42,167	44,832	44,740	42,959	42,703	41,817	40,934
White, non-Hispanic...	30,393	29,508	30,041	29,464	28,525	27,461	26,755	25,509
Asian/Pacific Islander...	4,196	4,641	6,023	6,217	6,480	6,684	6,492	6,411
Black, non-Hispanic...	1,360	1,474	1,639	1,658	1,794	1,857	1,896	2,008
Hispanic...	1,897	2,117	2,432	2,545	2,661	2,876	3,034	3,133
American Indian/Alaskan Native...	223	250	213	232	272	298	315	323
Other or unknown...	2,698	4,177	4,484	4,624	3,227	3,527	3,325	3,550
Non-U.S. citizens...	11,288	10,880	9,609	9,541	9,821	9,297	9,482	10,073
Research I:								
Total...	25,799	25,771	26,520	26,535	25,899	25,362	25,081	24,795
Total U.S. citizens and permanent residents...	18,504	18,432	19,517	19,469	18,683	18,705	18,374	17,883
White, non-Hispanic...	14,617	14,090	14,435	13,922	13,085	12,576	12,261	11,765
Asian/Pacific Islander...	2,119	2,327	2,707	3,038	3,122	3,309	3,316	3,188
Black, non-Hispanic...	476	491	514	551	589	614	596	587
Hispanic...	742	863	930	988	952	1,056	1,035	1,063
American Indian/Alaskan Native...	66	70	70	75	95	108	102	117
Other or unknown...	484	591	861	895	840	1,042	1,064	1,163
Non-U.S. citizens...	7,295	7,339	7,003	7,066	7,216	6,657	6,707	6,912
Non-research I:								
Total...	26,256	27,276	27,921	27,746	26,881	26,638	26,218	26,212
Total U.S. citizens and permanent residents...	22,263	23,735	25,315	25,271	24,276	23,998	23,443	23,051
White, non-Hispanic...	15,776	15,418	15,606	15,542	15,440	14,885	14,494	13,744
Asian/Pacific Islander...	2,077	2,314	3,316	3,179	3,358	3,375	3,176	3,223
Black, non-Hispanic...	884	983	1,125	1,107	1,205	1,243	1,300	1,421
Hispanic...	1,155	1,254	1,502	1,557	1,709	1,820	1,999	2,070
American Indian/Alaskan Native...	157	180	143	157	177	190	213	206
Other or unknown...	2,214	3,586	3,623	3,729	2,387	2,485	2,261	2,387
Non-U.S. citizens...	3,993	3,541	2,606	2,475	2,605	2,640	2,775	3,161

See explanatory information and SOURCES at end of table.

Appendix table 3-6. Science and engineering graduate students in California, by citizenship, racial/ethnic background of U.S. citizens and permanent residents, and Carnegie classification by type of control: 1990-97

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Carnegie classification, citizenship and race/ethnicity	1990	1991	1992	1993	1994	1995	1996	1997
Public institutions								
All institutions:								
Total...	31,235	32,125	32,829	32,056	31,797	31,185	30,579	29,961
Total U.S. citizens and permanent residents...	24,468	25,800	27,752	27,233	26,760	26,464	25,711	24,600
White, non-Hispanic...	17,666	17,150	17,471	16,695	16,928	16,034	15,649	14,606
Asian/Pacific Islander...	2,660	3,079	4,153	4,199	4,460	4,559	4,272	4,120
Black, non-Hispanic...	798	897	1,011	981	1,082	1,049	1,052	1,075
Hispanic...	1,251	1,393	1,630	1,695	1,841	1,969	2,026	2,041
American Indian/Alaskan Native...	123	142	135	142	156	185	200	204
Other or unknown...	1,970	3,139	3,352	3,521	2,293	2,668	2,512	2,554
Non-U.S. citizens...	6,767	6,325	5,077	4,823	5,037	4,721	4,868	5,361
Research I:								
Total...	15,236	15,181	15,479	15,483	15,771	15,491	15,423	15,183
Total U.S. citizens and permanent residents...	11,088	11,256	12,030	12,205	12,473	12,612	12,474	12,011
White, non-Hispanic...	8,789	8,603	8,817	8,630	8,735	8,404	8,314	7,924
Asian/Pacific Islander...	1,167	1,305	1,580	1,837	1,995	2,179	2,114	2,010
Black, non-Hispanic...	258	284	289	301	339	339	341	334
Hispanic...	466	536	604	644	666	729	710	704
American Indian/Alaskan Native...	45	49	50	53	67	80	86	95
Other or unknown...	363	479	690	740	671	881	909	944
Non-U.S. citizens...	4,148	3,925	3,449	3,278	3,298	2,879	2,949	3,172
Non-research I:								
Total...	15,999	16,944	17,350	16,573	16,026	15,694	15,156	14,778
Total U.S. citizens and permanent residents...	13,380	14,544	15,722	15,028	14,287	13,852	13,237	12,589
White, non-Hispanic...	8,877	8,547	8,654	8,065	8,193	7,630	7,335	6,682
Asian/Pacific Islander...	1,493	1,774	2,573	2,362	2,465	2,380	2,158	2,110
Black, non-Hispanic...	540	613	722	680	743	710	711	741
Hispanic...	785	857	1,026	1,051	1,175	1,240	1,316	1,337
American Indian/Alaskan Native...	78	93	85	89	89	105	114	109
Other or unknown...	1,607	2,660	2,662	2,781	1,622	1,787	1,603	1,610
Non-U.S. citizens...	2,619	2,400	1,628	1,545	1,739	1,842	1,919	2,189

See explanatory information and SOURCES at end of table.

Appendix table 3-6. Science and engineering graduate students in California, by citizenship, racial/ethnic background of U.S. citizens and permanent residents, and Carnegie classification by type of control: 1990–97

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Carnegie classification, citizenship and race/ethnicity	1990	1991	1992	1993	1994	1995	1996	1997
Private institutions								
All institutions:								
Total...	20,820	20,922	21,612	22,225	20,983	20,815	20,720	21,046
Total U.S. citizens and permanent residents...	16,299	16,367	17,080	17,507	16,199	16,239	16,106	16,334
White, non-Hispanic...	12,727	12,358	12,570	12,769	11,597	11,427	11,106	10,903
Asian/Pacific Islander...	1,536	1,562	1,870	2,018	2,020	2,125	2,220	2,291
Black, non-Hispanic...	562	577	628	677	712	808	844	933
Hispanic...	646	724	802	850	820	907	1,008	1,092
American Indian/Alaskan Native...	100	108	78	90	116	113	115	119
Other or unknown...	728	1,038	1,132	1,103	934	859	813	996
Non-U.S. citizens...	4,521	4,555	4,532	4,718	4,784	4,576	4,614	4,712
Research I:								
Total...	10,563	10,590	11,041	11,052	10,128	9,871	9,658	9,612
Total U.S. citizens and permanent residents...	7,416	7,176	7,487	7,264	6,210	6,093	5,900	5,872
White, non-Hispanic...	5,828	5,487	5,618	5,292	4,350	4,172	3,947	3,841
Asian/Pacific Islander...	952	1,022	1,127	1,201	1,127	1,130	1,202	1,178
Black, non-Hispanic...	218	207	225	250	250	275	255	253
Hispanic...	276	327	326	344	286	327	325	359
American Indian/Alaskan Native...	21	21	20	22	28	28	16	22
Other or unknown...	121	112	171	155	169	161	155	219
Non-U.S. citizens...	3,147	3,414	3,554	3,788	3,918	3,778	3,758	3,740
Non-research I:								
Total...	10,257	10,332	10,571	11,173	10,855	10,944	11,062	11,434
Total U.S. citizens and permanent residents...	8,883	9,191	9,593	10,243	9,989	10,146	10,206	10,462
White, non-Hispanic...	6,899	6,871	6,952	7,477	7,247	7,255	7,159	7,062
Asian/Pacific Islander...	584	540	743	817	893	995	1,018	1,113
Black, non-Hispanic...	344	370	403	427	462	533	589	680
Hispanic...	370	397	476	506	534	580	683	733
American Indian/Alaskan Native...	79	87	58	68	88	85	99	97
Other or unknown...	607	926	961	948	765	698	658	777
Non-U.S. citizens...	1,374	1,141	978	930	866	798	856	972

SOURCE: National Science Foundation/Division of Science Resources Studies, Survey of Graduate Students and Postdoctorates in Science and Engineering.

Appendix table 3-7. Science and engineering graduate students in Texas, by citizenship, racial/ethnic background of U.S. citizens and permanent residents, and Carnegie classification by type of control: 1990-97

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Carnegie classification, citizenship and racial/ethnic background	1990	1991	1992	1993	1994	1995	1996	1997
		Total, all institutions						
All institutions:								
Total...	26,052	27,564	30,002	29,886	28,039	26,816	26,336	26,779
Total U.S. citizens and permanent residents...	18,866	19,459	21,245	21,681	20,551	19,963	19,750	19,873
White, non-Hispanic...	15,583	15,818	17,139	17,066	15,809	15,214	14,679	14,369
Asian/Pacific Islander...	1,292	1,462	1,519	1,834	1,790	1,639	1,736	1,881
Black, non-Hispanic...	648	738	885	955	863	875	996	1,032
Hispanic...	1,078	1,250	1,476	1,527	1,508	1,597	1,745	1,796
American Indian/Alaskan Native...	56	56	87	65	78	85	87	104
Other or unknown...	209	135	139	234	503	553	507	691
Non-U.S. citizens...	7,186	8,105	8,757	8,205	7,488	6,853	6,586	6,906
Research I:								
Total...	4,306	4,559	4,715	4,722	4,550	4,199	3,529	3,864
Total U.S. citizens and permanent residents...	2,651	2,739	3,017	3,048	2,900	2,722	2,355	2,442
White, non-Hispanic...	2,403	2,471	2,674	2,674	2,461	2,322	2,012	2,024
Asian/Pacific Islander...	73	61	127	145	154	142	123	184
Black, non-Hispanic...	29	30	46	45	49	52	45	46
Hispanic...	117	136	154	168	171	168	145	164
American Indian/Alaskan Native...	9	8	7	8	10	9	8	7
Other or unknown...	20	33	9	8	55	29	22	17
Non-U.S. citizens...	1,655	1,820	1,698	1,674	1,650	1,477	1,174	1,422
Non-research I:								
Total...	21,746	23,005	25,287	25,164	23,489	22,617	22,807	22,915
Total U.S. citizens and permanent residents...	16,215	16,720	18,228	18,633	17,651	17,241	17,395	17,431
White, non-Hispanic...	13,180	13,347	14,465	14,392	13,348	12,892	12,667	12,345
Asian/Pacific Islander...	1,219	1,401	1,392	1,689	1,636	1,497	1,613	1,697
Black, non-Hispanic...	619	708	839	910	814	823	951	986
Hispanic...	961	1,114	1,322	1,359	1,337	1,429	1,600	1,632
American Indian/Alaskan Native...	47	48	80	57	68	76	79	97
Other or unknown...	189	102	130	226	448	524	485	674
Non-U.S. citizens...	5,531	6,285	7,059	6,531	5,838	5,376	5,412	5,484

See explanatory information and SOURCES at end of table.

Appendix table 3-7. Science and engineering graduate students in Texas, by citizenship, racial/ethnic background of U.S. citizens and permanent residents, and Carnegie classification by type of control: 1990-97

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Carnegie classification, citizenship and racial/ethnic background	1990	1991	1992	1993	1994	1995	1996	1997	
		Public institutions							
All institutions:									
Total...	23,421	24,852	26,844	26,601	24,785	23,443	22,925	23,306	
Total U.S. citizens and permanent residents...	16,864	17,399	18,807	19,089	17,983	17,227	16,971	17,063	
White, non-Hispanic...	13,942	14,106	15,117	14,969	13,752	13,071	12,546	12,248	
Asian/Pacific Islander...	1,110	1,321	1,407	1,651	1,609	1,438	1,512	1,655	
Black, non-Hispanic...	578	637	767	831	728	729	852	860	
Hispanic...	996	1,151	1,311	1,364	1,334	1,396	1,519	1,563	
American Indian/Alaskan Native...	55	52	79	56	63	68	75	84	
Other or unknown...	183	132	126	218	497	525	467	653	
Non-U.S. citizens...	6,557	7,453	8,037	7,512	6,802	6,216	5,954	6,243	
Research I:									
Total...	4,306	4,559	4,715	4,722	4,550	4,199	3,529	3,864	
Total U.S. citizens and permanent residents...	2,651	2,739	3,017	3,048	2,900	2,722	2,355	2,442	
White, non-Hispanic...	2,403	2,471	2,674	2,674	2,461	2,322	2,012	2,024	
Asian/Pacific Islander...	73	61	127	145	154	142	123	184	
Black, non-Hispanic...	29	30	46	45	49	52	45	46	
Hispanic...	117	136	154	168	171	168	145	164	
American Indian/Alaskan Native...	9	8	7	8	10	9	8	7	
Other or unknown...	20	33	9	8	55	29	22	17	
Non-U.S. citizens...	1,655	1,820	1,698	1,674	1,650	1,477	1,174	1,422	
Non-research I:									
Total...	19,115	20,293	22,129	21,879	20,235	19,244	19,396	19,442	
Total U.S. citizens and permanent residents...	14,213	14,660	15,790	16,041	15,083	14,505	14,616	14,621	
White, non-Hispanic...	11,539	11,635	12,443	12,295	11,291	10,749	10,534	10,224	
Asian/Pacific Islander...	1,037	1,260	1,280	1,506	1,455	1,296	1,389	1,471	
Black, non-Hispanic...	549	607	721	786	679	677	807	814	
Hispanic...	879	1,015	1,157	1,196	1,163	1,228	1,374	1,399	
American Indian/Alaskan Native...	46	44	72	48	53	59	67	77	
Other or unknown...	163	99	117	210	442	496	445	636	
Non-U.S. citizens...	4,902	5,633	6,339	5,838	5,152	4,739	4,780	4,821	

See explanatory information and SOURCES at end of table.

Appendix table 3-7. Science and engineering graduate students in Texas, by citizenship, racial/ethnic background of U.S. citizens and permanent residents, and Carnegie classification by type of control: 1990-97

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Carnegie classification, citizenship and racial/ethnic background	1990	1991	1992	1993	1994	1995	1996	1997
Private institutions								
All institutions:								
Total...	2,631	2,712	3,158	3,285	3,254	3,373	3,411	3,473
Total U.S. citizens and permanent residents...	2,002	2,060	2,438	2,592	2,568	2,736	2,779	2,810
White, non-Hispanic...	1,641	1,712	2,022	2,097	2,057	2,143	2,133	2,121
Asian/Pacific Islander...	182	141	112	183	181	201	224	226
Black, non-Hispanic...	70	101	118	124	135	146	144	172
Hispanic...	82	99	165	163	174	201	226	233
American Indian/Alaskan Native...	1	4	8	9	15	17	12	20
Other or unknown...	26	3	13	16	6	28	40	38
Non-U.S. citizens...	629	652	720	693	686	637	632	663
Research I:								
Total...	0	0	0	0	0	0	0	0
Total U.S. citizens and permanent residents...	0	0	0	0	0	0	0	0
White, non-Hispanic...	0	0	0	0	0	0	0	0
Asian/Pacific Islander...	0	0	0	0	0	0	0	0
Black, non-Hispanic...	0	0	0	0	0	0	0	0
Hispanic...	0	0	0	0	0	0	0	0
American Indian/Alaskan Native...	0	0	0	0	0	0	0	0
Other or unknown...	0	0	0	0	0	0	0	0
Non-U.S. citizens...	0	0	0	0	0	0	0	0
Non-research I:								
Total...	2,631	2,712	3,158	3,285	3,254	3,373	3,411	3,473
Total U.S. citizens and permanent residents...	2,002	2,060	2,438	2,592	2,568	2,736	2,779	2,810
White, non-Hispanic...	1,641	1,712	2,022	2,097	2,057	2,143	2,133	2,121
Asian/Pacific Islander...	182	141	112	183	181	201	224	226
Black, non-Hispanic...	70	101	118	124	135	146	144	172
Hispanic...	82	99	165	163	174	201	226	233
American Indian/Alaskan Native...	1	4	8	9	15	17	12	20
Other or unknown...	26	3	13	16	6	28	40	38
Non-U.S. citizens...	629	652	720	693	686	637	632	663

SOURCE: National Science Foundation/Division of Science Resources Studies, Survey of Graduate Students and Postdoctorates in Science and Engineering.

Appendix table 3-8. Science and engineering graduate students, by sex, field, and citizenship, and by racial/ethnic background of U.S. citizens and permanent residents: 1994–97

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Field	Year	Total	U.S. citizens and permanent residents						Temporary residents
			White, non- Hispanic	Asian/ Pacific Islander	Black, non- Hispanic	Hispanic	American Indian/ Alaskan Native	Other/ unknown	
Total enrollment									
Science and engineering, total...	1994	431,251	255,719	26,474	17,611	13,281	1,383	14,627	102,156
	1995	422,555	245,889	25,901	18,283	14,117	1,516	18,311	98,538
	1996	415,363	238,077	25,947	19,071	14,638	1,539	17,937	98,154
	1997	407,644	227,936	26,078	19,363	14,988	1,599	18,871	98,809
Sciences, total...	1994	318,228	199,699	16,697	14,827	10,420	1,141	10,272	65,172
	1995	315,356	193,933	16,893	15,427	11,309	1,285	13,438	63,071
	1996	312,140	188,965	17,510	16,176	11,703	1,305	13,356	63,125
	1997	306,636	181,919	17,924	16,489	12,177	1,361	14,379	62,387
Physical sciences...	1994	34,449	18,422	1,923	856	675	67	797	11,709
	1995	33,417	17,487	1,780	897	732	76	1,020	11,425
	1996	32,355	16,762	1,743	986	743	60	865	11,196
	1997	31,108	15,749	1,638	952	784	70	1,001	10,914
Earth, atmospheric, & ocean sciences...	1994	16,042	11,351	454	203	344	49	375	3,266
	1995	15,805	11,322	425	219	366	53	473	2,947
	1996	15,280	10,956	411	223	381	65	477	2,767
	1997	14,644	10,486	417	206	407	82	530	2,516
Mathematical sciences...	1994	19,579	10,496	1,208	673	369	36	734	6,063
	1995	18,509	9,659	1,121	689	400	70	761	5,809
	1996	18,015	9,201	1,225	711	425	41	651	5,761
	1997	16,759	8,382	1,052	657	426	43	651	5,548
Computer sciences...	1994	34,128	15,709	4,056	1,182	633	43	1,441	11,064
	1995	33,432	14,739	4,053	1,155	664	55	1,972	10,794
	1996	34,592	14,443	4,269	1,278	701	53	1,993	11,855
	1997	36,010	14,050	4,702	1,303	726	60	2,361	12,808
Agricultural sciences...	1994	12,199	7,972	276	239	263	37	273	3,139
	1995	12,367	7,978	274	294	288	59	377	3,097
	1996	11,914	7,732	281	268	367	49	269	2,948
	1997	11,810	7,745	302	229	400	62	347	2,725
Biological sciences...	1994	58,143	36,389	3,953	1,709	1,651	183	1,429	12,829
	1995	58,736	36,509	4,299	1,879	1,823	205	1,813	12,208
	1996	58,128	36,327	4,464	2,010	1,847	200	1,790	11,490
	1997	57,135	35,041	4,478	2,171	1,983	198	2,098	11,166
Psychology...	1994	54,554	42,062	1,583	3,529	2,485	317	2,235	2,343
	1995	53,641	40,146	1,598	3,359	2,799	330	3,322	2,087
	1996	53,209	39,327	1,776	3,455	3,002	359	3,317	1,973
	1997	53,142	38,699	1,892	3,641	3,084	340	3,481	2,005
Social sciences...	1994	89,134	57,298	3,244	6,436	4,000	409	2,988	14,759
	1995	89,449	56,093	3,343	6,935	4,237	437	3,700	14,704
	1996	88,647	54,217	3,341	7,245	4,237	478	3,994	15,135
	1997	86,028	51,767	3,443	7,330	4,367	506	3,910	14,705
Engineering...	1994	113,023	56,020	9,777	2,784	2,861	242	4,355	36,984
	1995	107,199	51,956	9,008	2,856	2,808	231	4,873	35,467
	1996	103,223	49,112	8,437	2,895	2,935	234	4,581	35,029
	1997	101,008	46,017	8,154	2,874	2,811	238	4,492	36,422

See explanatory information and SOURCES at end of table.

Appendix table 3-8. Science and engineering graduate students, by sex, field, and citizenship, and by racial/ethnic background of U.S. citizens and permanent residents: 1994-97

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Field	Year	Total	U.S. citizens and permanent residents						Temporary residents
			White, non- Hispanic	Asian/ Pacific Islander	Black, non- Hispanic	Hispanic	American Indian/ Alaskan Native	Other/ unknown	
Men									
Science and engineering, total...	1994	272,120	153,625	17,152	8,049	7,198	693	9,136	76,267
	1995	262,341	146,057	16,371	8,211	7,406	753	11,181	72,362
	1996	253,629	139,370	15,953	8,253	7,673	768	10,588	71,024
	1997	245,615	131,453	15,769	8,344	7,696	804	11,008	70,541
Sciences, total...	1994	177,146	106,833	9,190	6,082	4,917	514	5,483	44,127
	1995	173,156	102,983	9,143	6,254	5,210	571	7,069	41,926
	1996	168,658	98,885	9,297	6,301	5,407	577	6,785	41,406
	1997	163,322	93,702	9,406	6,385	5,525	624	7,385	40,295
Physical sciences...	1994	25,290	13,745	1,253	497	444	49	562	8,740
	1995	24,327	13,004	1,159	529	470	57	722	8,386
	1996	23,303	12,387	1,096	550	455	42	621	8,152
	1997	22,257	11,571	1,045	508	500	46	689	7,898
Earth, atmospheric, & ocean sciences...	1994	10,689	7,403	297	118	214	26	242	2,389
	1995	10,336	7,247	264	117	224	32	302	2,150
	1996	9,786	6,865	250	116	233	36	292	1,994
	1997	9,187	6,413	253	105	240	47	332	1,797
Mathematical sciences...	1994	13,044	6,824	735	343	241	24	503	4,374
	1995	12,248	6,230	669	385	248	43	520	4,153
	1996	11,794	5,910	702	368	266	24	425	4,099
	1997	10,875	5,335	624	348	256	29	441	3,842
Computer sciences...	1994	26,043	12,442	2,695	696	473	36	1,053	8,648
	1995	25,306	11,664	2,715	652	502	40	1,535	8,198
	1996	25,802	11,412	2,836	718	524	39	1,481	8,792
	1997	26,133	10,909	3,050	768	516	43	1,711	9,136
Agricultural sciences...	1994	7,911	5,002	168	118	142	20	165	2,296
	1995	7,935	4,988	147	150	154	29	235	2,232
	1996	7,502	4,734	142	131	203	23	168	2,101
	1997	7,277	4,639	164	105	242	34	189	1,904
Biological sciences...	1994	29,988	18,470	2,022	671	769	77	714	7,265
	1995	29,890	18,393	2,165	691	854	87	963	6,737
	1996	29,360	18,290	2,257	725	852	93	943	6,200
	1997	28,513	17,496	2,170	783	900	91	1,058	6,015
Psychology...	1994	16,416	12,712	435	851	705	97	675	941
	1995	15,877	11,983	416	817	762	93	949	857
	1996	15,403	11,574	469	810	829	111	902	708
	1997	15,499	11,300	506	908	860	118	1,058	749
Social sciences...	1994	47,765	30,235	1,585	2,788	1,929	185	1,569	9,474
	1995	47,237	29,474	1,608	2,913	1,996	190	1,843	9,213
	1996	45,708	27,713	1,545	2,883	2,045	209	1,953	9,360
	1997	43,581	26,039	1,594	2,860	2,011	216	1,907	8,954
Engineering...	1994	94,974	46,792	7,962	1,967	2,281	179	3,653	32,140
	1995	89,185	43,074	7,228	1,957	2,196	182	4,112	30,436
	1996	84,971	40,485	6,656	1,952	2,266	191	3,803	29,618
	1997	82,293	37,751	6,363	1,959	2,171	180	3,623	30,246

See explanatory information and SOURCES at end of table.

Appendix table 3-8. Science and engineering graduate students, by sex, field, and citizenship, and by racial/ethnic background of U.S. citizens and permanent residents: 1994–97

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Field	Year	Total	U.S. citizens and permanent residents						Temporary residents
			White, non- Hispanic	Asian/ Pacific Islander	Black, non- Hispanic	Hispanic	American Indian/ Alaskan Native	Other/ unknown	
Women									
Science and engineering, total...	1994	159,131	102,094	9,322	9,562	6,083	690	5,491	25,889
	1995	160,214	99,832	9,530	10,072	6,711	763	7,130	26,176
	1996	161,734	98,707	9,994	10,818	6,965	771	7,349	27,130
	1997	162,029	96,483	10,309	11,019	7,292	795	7,863	28,268
Sciences, total...	1994	141,082	92,866	7,507	8,745	5,503	627	4,789	21,045
	1995	142,200	90,950	7,750	9,173	6,099	714	6,369	21,145
	1996	143,482	90,080	8,213	9,875	6,296	728	6,571	21,719
	1997	143,314	88,217	8,518	10,104	6,652	737	6,994	22,092
Physical sciences...	1994	9,159	4,677	670	359	231	18	235	2,969
	1995	9,090	4,483	621	368	262	19	298	3,039
	1996	9,052	4,375	647	436	288	18	244	3,044
	1997	8,851	4,178	593	444	284	24	312	3,016
Earth, atmospheric, & ocean sciences...	1994	5,353	3,948	157	85	130	23	133	877
	1995	5,469	4,075	161	102	142	21	171	797
	1996	5,494	4,091	161	107	148	29	185	773
	1997	5,457	4,073	164	101	167	35	198	719
Mathematical sciences...	1994	6,535	3,672	473	330	128	12	231	1,689
	1995	6,261	3,429	452	304	152	27	241	1,656
	1996	6,221	3,291	523	343	159	17	226	1,662
	1997	5,884	3,047	428	309	170	14	210	1,706
Computer sciences...	1994	8,085	3,267	1,361	486	160	7	388	2,416
	1995	8,126	3,075	1,338	503	162	15	437	2,596
	1996	8,790	3,031	1,433	560	177	14	512	3,063
	1997	9,877	3,141	1,652	535	210	17	650	3,672
Agricultural sciences...	1994	4,288	2,970	108	121	121	17	108	843
	1995	4,432	2,990	127	144	134	30	142	865
	1996	4,412	2,998	139	137	164	26	101	847
	1997	4,533	3,106	138	124	158	28	158	821
Biological sciences...	1994	28,155	17,919	1,931	1,038	882	106	715	5,564
	1995	28,846	18,116	2,134	1,188	969	118	850	5,471
	1996	28,768	18,037	2,207	1,285	995	107	847	5,290
	1997	28,622	17,545	2,308	1,388	1,083	107	1,040	5,151
Psychology...	1994	38,138	29,350	1,148	2,678	1,780	220	1,560	1,402
	1995	37,764	28,163	1,182	2,542	2,037	237	2,373	1,230
	1996	37,806	27,753	1,307	2,645	2,173	248	2,415	1,265
	1997	37,643	27,399	1,386	2,733	2,224	222	2,423	1,256
Social sciences...	1994	41,369	27,063	1,659	3,648	2,071	224	1,419	5,285
	1995	42,212	26,619	1,735	4,022	2,241	247	1,857	5,491
	1996	42,939	26,504	1,796	4,362	2,192	269	2,041	5,775
	1997	42,447	25,728	1,849	4,470	2,356	290	2,003	5,751
Engineering...	1994	18,049	9,228	1,815	817	580	63	702	4,844
	1995	18,014	8,882	1,780	899	612	49	761	5,031
	1996	18,252	8,627	1,781	943	669	43	778	5,411
	1997	18,715	8,266	1,791	915	640	58	869	6,176

SOURCE: National Science Foundation/Division of Science Resources Studies, Survey of Graduate Students and Postdoctorates in Science and Engineering.

Appendix table 3-9. Black graduate students in science and engineering fields in all institutions and in historically black colleges and universities (HBCUs), by field: 1982–97

Field	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Total, all black students																
Total, science and engineering fields.....	10,388	10,941	10,679	10,451	10,460	10,426	11,191	11,775	12,774	13,691	15,445	17,118	17,611	18,283	19,071	19,363
Sciences, total.....	9,258	9,563	9,234	9,064	9,008	9,010	9,691	10,159	10,988	11,666	13,071	14,559	14,827	15,427	16,176	16,489
Physical sciences.....	553	575	596	535	524	536	569	633	654	699	807	843	856	897	986	952
Earth, atmospheric, and ocean sciences.....	103	114	115	127	98	93	107	95	123	141	202	227	203	219	223	206
Mathematical sciences.....	356	403	393	409	449	441	422	463	511	524	579	710	673	689	711	657
Computer sciences.....	528	568	567	622	702	769	839	848	985	1,093	1,108	1,168	1,182	1,155	1,278	1,303
Agricultural sciences.....	144	129	130	137	120	133	143	153	158	145	209	235	239	294	268	229
Biological sciences.....	1,127	1,161	1,159	1,183	1,103	1,055	1,153	1,212	1,249	1,317	1,493	1,737	1,709	1,879	2,010	2,171
Psychology.....	1,643	1,880	1,908	1,790	1,786	1,794	1,945	2,061	2,226	2,455	2,758	3,284	3,529	3,359	3,455	3,641
Social sciences.....	4,804	4,733	4,366	4,261	4,226	4,189	4,513	4,694	5,082	5,292	5,915	6,355	6,436	6,935	7,245	7,330
Engineering.....	1,130	1,378	1,445	1,387	1,452	1,416	1,500	1,616	1,786	2,025	2,374	2,559	2,784	2,856	2,895	2,874
Black students in HBCUs																
Total, science and engineering fields.....	1,444	1,576	1,870	1,587	1,624	1,487	1,671	1,700	1,913	1,959	2,075	2,433	2,768	2,906	3,174	3,279
Sciences, total.....	1,400	1,507	1,754	1,508	1,536	1,412	1,565	1,558	1,771	1,816	1,898	2,221	2,515	2,612	2,883	2,995
Physical sciences.....	157	182	200	166	159	160	165	179	174	190	179	211	231	253	279	286
Earth, atmospheric, and ocean sciences.....	8	5	7	10	3	10	11	3	14	24	30	42	30	38	34	43
Mathematical sciences.....	53	83	95	114	134	134	106	107	108	107	111	169	155	139	157	128
Computer sciences.....	85	92	114	67	82	78	117	123	159	189	200	190	227	210	217	219
Agricultural sciences.....	10	6	9	21	22	13	11	10	34	37	70	84	102	130	111	88
Biological sciences.....	367	360	355	313	272	239	248	273	278	278	306	403	453	492	543	593
Psychology.....	117	172	237	217	232	196	280	276	313	317	352	428	489	413	430	490
Social sciences.....	603	607	737	600	632	582	627	587	691	674	650	694	828	937	1,112	1,148
Engineering.....	44	69	116	79	88	75	106	142	142	143	177	212	253	294	291	284
Percent of black students in HBCUs																
Total, science and engineering fields.....	14	14	18	15	16	14	15	14	15	14	13	14	16	16	17	17
Sciences, total.....	15	16	19	17	17	16	16	15	16	16	15	15	17	17	18	18
Physical sciences.....	28	32	34	31	30	30	29	28	27	27	22	25	27	28	30	30
Earth, atmospheric, and ocean sciences.....	8	4	6	8	3	11	10	3	11	17	15	19	15	17	15	21
Mathematical sciences.....	15	21	24	28	30	30	25	23	21	20	19	26	23	20	22	20
Computer sciences.....	16	16	20	11	12	10	14	15	16	17	18	16	19	18	17	17
Agricultural sciences.....	7	5	7	15	18	10	8	7	22	26	34	41	43	44	41	38
Biological sciences.....	33	31	31	26	25	23	22	23	22	21	23	27	26	27	27	27
Psychology.....	7	9	12	12	13	11	14	13	14	13	13	13	14	12	12	14
Social sciences.....	13	13	17	14	15	14	14	13	14	13	11	11	13	14	15	16
Engineering.....	4	5	8	6	6	5	7	9	8	7	8	8	9	10	10	10

SOURCE: National Science Foundation/Division of Science Resources Studies, Survey of Graduate Students and Postdoctorates in Science and Engineering.

Appendix table 3-10. Top 50 institutions enrolling Hispanic graduate students in science and engineering, ranked by number of Hispanic students enrolled in science and engineering in 1997: 1993–97

Rank	Academic institution	1993	1994	1995	1996	1997
	Total Hispanics in Graduate Student Survey Institutions.....	13,381	13,281	14,117	14,638	14,988
1	University of Puerto Rico, Rio Piedras Campus *	1,093	850	811	798	848
2	University of Puerto Rico, Mayaguez Campus *	345	332	400	519	517
3	Florida International University *	248	309	332	321	349
4	Caribbean Center for Advanced Studies *	178	202	324	320	319
5	University of Texas at El Paso *	166	172	191	230	212
6	Texas A&M University.....	190	182	190	223	202
7	California State University at Los Angeles *	131	149	168	195	196
8	University of California, Los Angeles.....	140	191	196	182	186
9	University of California at Berkeley.....	198	192	179	188	181
10	Texas A&M University-Kingsville *	125	127	132	131	177
11	University of Southern California.....	189	120	154	150	167
12	University of Texas at Austin.....	168	171	168	145	164
13	Stanford University.....	139	147	154	149	162
14	University of New Mexico *	172	141	182	143	162
15	University of Colorado.....	147	138	131	138	157
16	Nova Southeastern University.....	125	52	137	151	153
17	University of Florida.....	116	113	108	132	153
18	San Diego State University *	100	112	73	103	139
19	University of Miami *	173	189	140	158	139
20	University of Michigan.....	141	157	152	156	138
21	Arizona State University.....	130	129	127	127	126
22	New Mexico State University *	124	130	128	178	126
23	Teachers College, Columbia University.....	81	99	108	121	125
24	California State University-Long Beach.....	136	136	136	136	123
25	University of Wisconsin-Madison.....	107	121	113	105	119
26	Massachusetts Institute of Technology.....	74	68	95	117	116
27	University of Arizona.....	121	121	113	130	114
28	University of South Florida.....	98	107	130	97	114
29	Harvard University.....	104	118	119	109	112
30	University of Texas at San Antonio *	73	94	87	91	112
31	National University.....	57	50	51	115	111
32	George Washington University.....	102	92	96	134	109
33	University of California at Davis.....	99	53	102	107	106
34	New Jersey Institute of Technology.....	50	70	87	89	103
35	Purdue University.....	4	4	5	4	101
36	University of Central Florida.....	38	89	25	107	100
37	New York University.....	88	81	87	107	99
38	University of Massachusetts.....	60	55	62	59	96
39	California State University-Fresno *	64	73	87	86	95
40	University of Illinois at Urbana-Champaign.....	79	95	107	76	95
41	SUNY at Albany.....	56	53	58	76	94
42	California State University-Northridge *	116	113	79	73	91
43	American University.....	87	74	87	90	88
44	University of Puerto Rico, Medical Sciences Campus *	131	117	139	123	86
45	University of Washington.....	70	70	80	84	86
46	Cornell University.....	79	83	90	97	85
47	CUNY City College *	89	42	59	52	85
48	University of Maryland - College Park.....	54	66	73	79	84
49	University of California at San Diego.....	82	92	88	83	83
50	University of Houston, Clear Lake.....	65	55	60	68	83

* Denotes Hispanic serving institution.

SOURCE: National Science Foundation/Division of Science Resources Studies, Survey of Graduate Students and Postdoctorates in Science and Engineering.

Appendix table 3-11. Hispanic graduate students in science and engineering fields in all institutions and in Puerto Rican colleges and universities, by field: 1982-97

Field	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Total, all Hispanic students																
Total, science and engineering fields...	7,724	8,812	8,683	8,614	8,658	8,823	9,098	9,436	10,159	11,045	12,246	13,381	13,281	14,117	14,638	14,988
Sciences, total...	6,629	7,371	7,192	7,133	7,056	7,093	7,379	7,729	8,273	8,921	9,783	10,687	10,420	11,309	11,703	12,177
Physical sciences...	496	563	535	599	629	591	624	680	642	649	680	747	675	732	743	784
Earth, atmospheric, and ocean sciences...	191	224	261	238	237	227	210	209	241	250	308	371	344	366	381	407
Mathematical sciences...	274	315	278	244	257	251	303	289	328	316	341	375	331	369	376	385
Computer sciences...	249	285	293	488	453	551	516	542	565	631	706	696	633	664	701	726
Agricultural sciences...	211	225	254	321	302	221	278	297	272	279	279	308	263	288	367	400
Biological sciences...	807	909	844	935	950	1,032	1,116	1,200	1,220	1,374	1,459	1,649	1,651	1,823	1,847	1,983
Psychology...	1,471	1,814	1,903	1,611	1,707	1,665	1,722	1,751	2,160	2,365	2,371	2,562	2,485	2,799	3,002	3,084
Social sciences...	2,914	3,021	2,810	2,679	2,508	2,540	2,585	2,745	2,822	3,024	3,604	3,939	4,000	4,237	4,237	4,367
Engineering...	1,095	1,441	1,491	1,481	1,602	1,730	1,719	1,707	1,886	2,124	2,463	2,694	2,861	2,808	2,935	2,811
Hispanic students in Puerto Rican colleges and universities																
Total, science and engineering fields...	1,551	1,672	1,810	1,903	1,881	1,593	1,507	1,513	1,588	1,703	1,590	1,775	1,521	1,708	1,783	1,798
Sciences, total...	1,490	1,610	1,732	1,813	1,784	1,500	1,410	1,446	1,524	1,612	1,478	1,624	1,374	1,544	1,581	1,630
Physical sciences...	109	119	116	141	152	145	141	125	112	95	117	141	131	133	142	161
Earth, atmospheric, and ocean sciences...	49	48	52	51	46	51	40	37	32	32	30	35	30	40	53	65
Mathematical sciences...	74	77	64	53	65	62	72	72	73	35	33	27	0	9	5	5
Computer sciences...	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Agricultural sciences...	77	76	86	127	109	56	48	46	46	45	50	50	40	64	103	111
Biological sciences...	149	146	150	148	153	164	185	197	160	241	188	240	208	249	238	257
Psychology...	504	461	460	505	536	407	417	393	460	582	381	410	271	393	384	383
Social sciences...	528	683	804	788	723	615	507	576	641	582	679	721	694	656	649	641
Engineering...	61	62	78	90	97	93	97	67	64	91	112	151	147	164	202	168
Percent of Hispanic students in Puerto Rican colleges and universities																
Total, science and engineering fields...	20	19	21	22	22	18	17	16	16	15	13	13	11	12	12	12
Sciences, total...	22	22	24	25	25	21	19	19	18	18	15	15	13	14	14	13
Physical sciences...	22	21	22	24	24	25	23	18	17	15	17	19	19	18	19	21
Earth, atmospheric, and ocean sciences...	26	21	20	21	19	22	19	18	13	13	10	9	9	11	14	16
Mathematical sciences...	27	24	23	22	25	25	24	25	22	11	10	7	0	2	1	1
Computer sciences...	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Agricultural sciences...	36	34	34	40	36	25	17	15	17	16	18	16	15	22	28	28
Biological sciences...	18	16	18	16	16	16	17	16	13	18	13	15	13	14	13	13
Psychology...	34	25	24	31	31	24	24	22	21	25	16	16	11	14	13	12
Social sciences...	18	23	29	29	29	24	20	21	23	19	19	18	17	15	15	15
Engineering...	6	4	5	6	6	5	6	4	3	4	5	6	5	6	7	6

SOURCE: National Science Foundation/Division of Science Resources Studies, Survey of Graduate Students and Postdoctorates in Science and Engineering.

Appendix table 3-12. Graduate student enrollment,¹ by disability status, sex, race/ethnicity, age, and attendance status: 1996

Sex, race/ethnicity, age and attendance status	Total	Students with disabilities	Students without disabilities
Number.....	2,784,000	89,000	2,695,000
[Percentage distribution]			
Sex			
Men.....	45.7	31.3	46.2
Women.....	54.3	68.7	53.8
Race/ethnicity			
White, non-Hispanic.....	80.6	73.9	80.9
Black, non-Hispanic.....	6.4	10.7	6.2
Hispanic.....	4.9	9.8	4.7
Asian/Pacific Islander.....	8.1	5.5	8.2
American Indian/Alaskan Native.....	--	--	--
Other.....	--	--	--
Age			
15 to 23.....	9.2	7.6	9.3
24 to 29.....	42.7	32.3	43.0
30 or older.....	48.1	60.0	47.7
Attendance status			
Part time.....	67.5	65.8	65.7
Full time.....	32.5	34.2	32.5

¹ Includes first-professional students.

KEY: -- Sample size too small for a reliable estimate.

NOTE: Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics. 1995–96 National Postsecondary Student Aid Study. (In National Center for Education Statistics, *Digest of Education Statistics: 1998* (NCES 1999-036), Table 211).

Appendix table 3-13. Graduate enrollment, by disability status and field: 1996

Disability status	Total	Social/ behavioral sciences	Life and physical sciences	Engineering/ computer science/math	Humanities	Education	Business/ management	Health	Law	Other	Missing/ undeclared
Percentage distribution											
Percentage											
Total (N=2,784,000).....	100	7.8	6.3	8.3	9.7	26.1	17.1	13.0	5.2	2.9	3.5
Students without disabilities (N=2,695,000).....	100	7.9	6.5	8.4	9.8	26.2	17.1	12.5	5.2	2.9	3.5
Students with disabilities (N=89,000).....	100	5.8	2.1	3.7	6.2	23.8	14.8	28.6	4.1	3.8	7.1
Standard errors											
Standard errors											
Total.....	NA	0.79	0.89	0.94	1.50	1.57	1.46	1.40	0.55	0.53	0.58
Students without disabilities.....	NA	0.81	0.90	0.96	1.53	1.60	1.50	1.37	0.56	0.54	0.59
Students with disabilities.....	NA	1.99	1.42	1.98	2.14	5.50	4.23	7.90	1.03	2.52	4.44

KEY: NA=Not applicable.

NOTE: Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1995–96 National Postsecondary Student Aid Study, data analysis system.

Women, Minorities, and Persons With Disabilities in Science and Engineering: 2000

Appendix table 3-14. Science and engineering graduate students, by field, sex, and enrollment status: 1997

Field	Both sexes			Women			Men		
	Total	Full-time	Part-time	Total	Full-time	Part-time	Total	Full-time	Part-time
Science and engineering, total.....	407,644	280,612	127,032	162,029	110,486	51,543	245,615	170,126	75,489
Sciences, total.....	306,636	215,018	91,618	143,314	97,981	45,333	163,322	117,037	46,285
Physical sciences.....	31,108	26,892	4,216	8,851	7,434	1,417	22,257	19,458	2,799
Earth, atmospheric, and ocean sciences.....	14,644	10,550	4,094	5,457	3,874	1,583	9,187	6,676	2,511
Mathematical sciences.....	16,759	12,153	4,606	5,884	3,974	1,910	10,875	8,179	2,696
Computer sciences.....	36,010	18,320	17,690	9,877	4,795	5,082	26,133	13,525	12,608
Agricultural sciences.....	11,810	9,110	2,700	4,533	3,512	1,021	7,277	5,598	1,679
Biological sciences.....	57,135	46,998	10,137	28,622	22,967	5,655	28,513	24,031	4,482
Psychology.....	53,142	35,522	17,620	37,643	24,711	12,932	15,499	10,811	4,688
Social sciences.....	86,028	55,473	30,555	42,447	26,714	15,733	43,581	28,759	14,822
Engineering.....	101,008	65,594	35,414	18,715	12,505	6,210	82,293	53,089	29,204

SOURCE: National Science Foundation/Division of Science Resources Studies, Survey of Graduate Students and Postdoctorates in Science and Engineering.

Appendix table 3-15. Science and engineering graduate students, by enrollment status, field, citizenship, and race/ethnicity: 1997

Field	Total graduate students	U.S. citizens and permanent residents						Temporary residents	
		Total	Black, non-Hispanic	American Indian/Alaskan Native	Asian/Pacific Islander	Hispanic	White, non-Hispanic		
Total enrollment									
Science and engineering, total...	407,644	308,835	19,363	1,599	26,078	14,988	227,936	18,871	98,809
Sciences, total...	306,636	244,249	16,489	1,361	17,924	12,177	181,919	14,379	62,387
Physical sciences...	31,108	20,194	952	70	1,638	784	15,749	1,001	10,914
Earth, atmospheric, and ocean sciences...	14,644	12,128	206	82	417	407	10,486	530	2,516
Mathematical sciences...	16,759	11,211	657	43	1,052	426	8,382	651	5,548
Computer sciences...	36,010	23,202	1,303	60	4,702	726	14,050	2,361	12,808
Agricultural sciences...	11,810	9,085	229	62	302	400	7,745	347	2,725
Biological sciences...	57,135	45,969	2,171	198	4,478	1,983	35,041	2,098	11,166
Psychology...	53,142	51,137	3,641	340	1,892	3,084	38,699	3,481	2,005
Social sciences...	86,028	71,323	7,330	506	3,443	4,367	51,767	3,910	14,705
Engineering...	101,008	64,586	2,874	238	8,154	2,811	46,017	4,492	36,422
Full-time									
Science and engineering, total...	280,612	196,041	11,415	1,123	17,068	9,549	147,386	9,500	84,571
Sciences, total...	215,018	161,197	9,736	983	12,335	7,957	122,693	7,493	53,821
Physical sciences...	26,892	16,796	741	58	1,345	649	13,284	719	10,096
Earth, atmospheric, and ocean sciences...	10,550	8,328	138	46	288	275	7,266	315	2,222
Mathematical sciences...	12,153	7,277	387	32	696	241	5,581	340	4,876
Computer sciences...	18,320	8,649	495	22	1,995	243	5,228	666	9,671
Agricultural sciences...	9,110	6,741	176	47	237	294	5,725	262	2,369
Biological sciences...	46,998	36,764	1,734	166	3,824	1,613	28,042	1,385	10,234
Psychology...	35,522	33,855	2,218	262	1,421	2,097	26,236	1,621	1,667
Social sciences...	55,473	42,787	3,847	350	2,529	2,545	31,331	2,185	12,686
Engineering...	65,594	34,844	1,679	140	4,733	1,592	24,693	2,007	30,750
Part-time									
Science and engineering, total...	127,032	112,794	7,948	476	9,010	5,439	80,550	9,371	14,238
Sciences, total...	91,618	83,052	6,753	378	5,589	4,220	59,226	6,886	8,566
Physical sciences...	4,216	3,398	211	12	293	135	2,465	282	818
Earth, atmospheric, and ocean sciences...	4,094	3,800	68	36	129	132	3,220	215	294
Mathematical sciences...	4,606	3,934	270	11	356	185	2,801	311	672
Computer sciences...	17,690	14,553	808	38	2,707	483	8,822	1,695	3,137
Agricultural sciences...	2,700	2,344	53	15	65	106	2,020	85	356
Biological sciences...	10,137	9,205	437	32	654	370	6,999	713	932
Psychology...	17,620	17,282	1,423	78	471	987	12,463	1,860	338
Social sciences...	30,555	28,536	3,483	156	914	1,822	20,436	1,725	2,019
Engineering...	35,414	29,742	1,195	98	3,421	1,219	21,324	2,485	5,672

SOURCE: National Science Foundation/Division of Science Resources Studies, Survey of Graduate Students and Postdoctorates in Science and Engineering.

**Appendix table 3-16. Full-time graduate students in science and engineering,
by sex, field and primary source of support: 1997**

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Field and primary source of support	Men		Women	
	Number	Percent	Number	Percent
Total, science and engineering:				
Total, all sources...	170,126	100.0	110,486	100.0
Federal, total...	38,010	22.3	18,679	16.9
Dept. of Defense...	7,354	4.3	1,360	1.2
Dept. of HHS, total...	8,938	5.3	7,798	7.1
NIH...	8,133	4.8	7,153	6.5
Other HHS...	805	0.5	645	0.6
NASA...	1,976	1.2	589	0.5
NSF...	9,531	5.6	3,697	3.3
USDA...	1,555	0.9	1,047	0.9
All other Federal...	8,656	5.1	4,188	3.8
Institutional support...	72,212	42.4	47,065	42.6
Other outside support, total...	16,068	9.4	7,124	6.4
All other U.S...	12,819	7.5	6,029	5.5
Foreign...	3,249	1.9	1,095	1.0
Self-support...	43,836	25.8	37,618	34.0
Sciences, total:				
Total, all sources...	117,037	100.0	97,981	100.0
Federal, total...	25,028	21.4	15,823	16.1
Dept. of Defense...	3,151	2.7	771	0.8
Dept. of HHS, total...	8,270	7.1	7,558	7.7
NIH...	7,576	6.5	6,949	7.1
Other HHS...	694	0.6	609	0.6
NASA...	928	0.8	376	0.4
NSF...	5,872	5.0	2,774	2.8
USDA...	1,405	1.2	983	1.0
All other Federal...	5,402	4.6	3,361	3.4
Institutional support...	53,025	45.3	42,459	43.3
Other outside support, total...	8,655	7.4	5,519	5.6
All other U.S...	6,603	5.6	4,650	4.7
Foreign...	2,052	1.8	869	0.9
Self-support...	30,329	25.9	34,180	34.9
Physical sciences:				
Total, all sources...	19,458	100.0	7,434	100.0
Federal, total...	7,068	36.3	2,376	32.0
Dept. of Defense...	863	4.4	174	2.3
Dept. of HHS, total...	1,264	6.5	689	9.3
NIH...	1,047	5.4	590	7.9
Other HHS...	217	1.1	99	1.3
NASA...	433	2.2	153	2.1
NSF...	2,552	13.1	814	10.9
USDA...	21	0.1	10	0.1
All other Federal...	1,935	9.9	536	7.2
Institutional support...	10,041	51.6	4,103	55.2
Other outside support, total...	1,338	6.9	538	7.2
All other U.S...	1,164	6.0	494	6.6
Foreign...	174	0.9	44	0.6
Self-support...	1,011	5.2	417	5.6

See explanatory information and SOURCES at end of table.

**Appendix table 3-16. Full-time graduate students in science and engineering,
by sex, field and primary source of support: 1997**

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Field and primary source of support	Men		Women	
	Number	Percent	Number	Percent
Earth, atmospheric, & ocean sciences:				
Total, all sources...	6,676	100.0	3,874	100.0
Federal, total...	2,058	30.8	1,061	27.4
Dept. of Defense...	281	4.2	85	2.2
Dept. of HHS, total...	20	0.3	20	0.5
NIH...	15	0.2	12	0.3
Other HHS...	5	0.1	8	0.2
NASA...	246	3.7	109	2.8
NSF...	753	11.3	448	11.6
USDA...	32	0.5	20	0.5
All other Federal...	726	10.9	379	9.8
Institutional support...	2,712	40.6	1,675	43.2
Other outside support, total...	621	9.3	264	6.8
All other U.S...	481	7.2	220	5.7
Foreign...	140	2.1	44	1.1
Self-support...	1,285	19.2	874	22.6
Mathematical sciences:				
Total, all sources...	8,179	100.0	3,974	100.0
Federal, total...	881	10.8	289	7.3
Dept. of Defense...	316	3.9	45	1.1
Dept. of HHS, total...	72	0.9	24	0.6
NIH...	49	0.6	17	0.4
Other HHS...	23	0.3	7	0.2
NASA...	15	0.2	4	0.1
NSF...	274	3.4	117	2.9
USDA...	11	0.1	5	0.1
All other Federal...	193	2.4	94	2.4
Institutional support...	5,730	70.1	2,736	68.8
Other outside support, total...	339	4.1	148	3.7
All other U.S...	204	2.5	106	2.7
Foreign...	135	1.7	42	1.1
Self-support...	1,229	15.0	801	20.2
Computer sciences:				
Total, all sources...	13,525	100.0	4,795	100.0
Federal, total...	2,614	19.3	556	11.6
Dept. of Defense...	1,220	9.0	211	4.4
Dept. of HHS, total...	90	0.7	16	0.3
NIH...	68	0.5	10	0.2
Other HHS...	22	0.2	6	0.1
NASA...	97	0.7	25	0.5
NSF...	894	6.6	193	4.0
USDA...	10	0.1	2	0.0
All other Federal...	303	2.2	109	2.3
Institutional support...	4,414	32.6	1,490	31.1
Other outside support, total...	917	6.8	266	5.5
All other U.S...	791	5.8	234	4.9
Foreign...	126	0.9	32	0.7
Self-support...	5,580	41.3	2,483	51.8

See explanatory information and SOURCES at end of table.

**Appendix table 3-16. Full-time graduate students in science and engineering,
by sex, field and primary source of support: 1997**

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Field and primary source of support	Men		Women	
	Number	Percent	Number	Percent
Agricultural sciences:				
Total, all sources...	5,598	100.0	3,512	100.0
Federal, total...	1,142	20.4	641	18.3
Dept. of Defense...	29	0.5	10	0.3
Dept. of HHS, total...	19	0.3	11	0.3
NIH...	11	0.2	10	0.3
Other HHS...	8	0.1	1	0.0
NASA...	16	0.3	12	0.3
NSF...	60	1.1	42	1.2
USDA...	614	11.0	342	9.7
All other Federal...	404	7.2	224	6.4
Institutional support...	2,157	38.5	1,514	43.1
Other outside support, total...	1,051	18.8	515	14.7
All other U.S...	795	14.2	432	12.3
Foreign...	256	4.6	83	2.4
Self-support...	1,248	22.3	842	24.0
Biological sciences:				
Total, all sources...	24,031	100.0	22,967	100.0
Federal, total...	8,609	35.8	7,665	33.4
Dept. of Defense...	220	0.9	152	0.7
Dept. of HHS, total...	6,206	25.8	5,599	24.4
NIH...	5,894	24.5	5,329	23.2
Other HHS...	312	1.3	270	1.2
NASA...	60	0.2	49	0.2
NSF...	857	3.6	678	3.0
USDA...	476	2.0	449	2.0
All other Federal...	790	3.3	738	3.2
Institutional support...	10,443	43.5	9,879	43.0
Other outside support, total...	1,933	8.0	1,674	7.3
All other U.S...	1,638	6.8	1,450	6.3
Foreign...	295	1.2	224	1.0
Self-support...	3,046	12.7	3,749	16.3
Psychology:				
Total, all sources...	10,811	100.0	24,711	100.0
Federal, total...	956	8.8	1,745	7.1
Dept. of Defense...	66	0.6	47	0.2
Dept. of HHS, total...	488	4.5	959	3.9
NIH...	407	3.8	782	3.2
Other HHS...	81	0.7	177	0.7
NASA...	14	0.1	6	0.0
NSF...	119	1.1	158	0.6
USDA...	2	0.0	5	0.0
All other Federal...	267	2.5	570	2.3
Institutional support...	4,480	41.4	9,031	36.5
Other outside support, total...	417	3.9	802	3.2
All other U.S...	391	3.6	771	3.1
Foreign...	26	0.2	31	0.1
Self-support...	4,958	45.9	13,133	53.1

See explanatory information and SOURCES at end of table.

**Appendix table 3-16. Full-time graduate students in science and engineering,
by sex, field and primary source of support: 1997**

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Field and primary source of support	Men		Women	
	Number	Percent	Number	Percent
Social sciences:				
Total, all sources...	28,759	100.0	26,714	100.0
Federal, total...	1,700	5.9	1,490	5.6
Dept. of Defense...	156	0.5	47	0.2
Dept. of HHS, total...	111	0.4	240	0.9
NIH...	85	0.3	199	0.7
Other HHS...	26	0.1	41	0.2
NASA...	47	0.2	18	0.1
NSF...	363	1.3	324	1.2
USDA...	239	0.8	150	0.6
All other Federal...	784	2.7	711	2.7
Institutional support...	13,048	45.4	12,031	45.0
Other outside support, total...	2,039	7.1	1,312	4.9
All other U.S...	1,139	4.0	943	3.5
Foreign...	900	3.1	369	1.4
Self-support...	11,972	41.6	11,881	44.5
Engineering, total:				
Total, all sources...	53,089	100.0	12,505	100.0
Federal, total...	12,982	24.5	2,856	22.8
Dept. of Defense...	4,203	7.9	589	4.7
Dept. of HHS, total...	668	1.3	240	1.9
NIH...	557	1.0	204	1.6
Other HHS...	111	0.2	36	0.3
NASA...	1,048	2.0	213	1.7
NSF...	3,659	6.9	923	7.4
USDA...	150	0.3	64	0.5
All other Federal...	3,254	6.1	827	6.6
Institutional support...	19,187	36.1	4,606	36.8
Other outside support, total...	7,413	14.0	1,605	12.8
All other U.S...	6,216	11.7	1,379	11.0
Foreign...	1,197	2.3	226	1.8
Self-support...	13,507	25.4	3,438	27.5
Chemical engineering:				
Total, all sources...	4,425	100.0	1,359	100.0
Federal, total...	1,248	28.2	396	29.1
Dept. of Defense...	141	3.2	26	1.9
Dept. of HHS, total...	106	2.4	31	2.3
NIH...	91	2.1	30	2.2
Other HHS...	15	0.3	1	0.1
NASA...	55	1.2	25	1.8
NSF...	516	11.7	191	14.1
USDA...	17	0.4	8	0.6
All other Federal...	413	9.3	115	8.5
Institutional support...	1,709	38.6	524	38.6
Other outside support, total...	868	19.6	260	19.1
All other U.S...	732	16.5	216	15.9
Foreign...	136	3.1	44	3.2
Self-support...	600	13.6	179	13.2

See explanatory information and SOURCES at end of table.

**Appendix table 3-16. Full-time graduate students in science and engineering,
by sex, field and primary source of support: 1997**

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Field and primary source of support	Men		Women	
	Number	Percent	Number	Percent
Civil engineering:				
Total, all sources...	8,353	100.0	2,906	100.0
Federal, total...	1,316	15.8	479	16.5
Dept. of Defense...	190	2.3	42	1.4
Dept. of HHS, total...	26	0.3	21	0.7
NIH...	22	0.3	19	0.7
Other HHS...	4	0.0	2	0.1
NASA...	102	1.2	19	0.7
NSF...	371	4.4	150	5.2
USDA...	24	0.3	16	0.6
All other Federal...	603	7.2	231	7.9
Institutional support...	3,480	41.7	1,219	41.9
Other outside support, total...	840	10.1	242	8.3
All other U.S...	655	7.8	207	7.1
Foreign...	185	2.2	35	1.2
Self-support...	2,717	32.5	966	33.2
Electrical engineering:				
Total, all sources...	16,096	100.0	2,830	100.0
Federal, total...	3,796	23.6	599	21.2
Dept. of Defense...	1,741	10.8	227	8.0
Dept. of HHS, total...	93	0.6	20	0.7
NIH...	56	0.3	12	0.4
Other HHS...	37	0.2	8	0.3
NASA...	196	1.2	33	1.2
NSF...	1,140	7.1	189	6.7
USDA...	12	0.1	3	0.1
All other Federal...	614	3.8	127	4.5
Institutional support...	5,780	35.9	953	33.7
Other outside support, total...	2,368	14.7	420	14.8
All other U.S...	2,092	13.0	359	12.7
Foreign...	276	1.7	61	2.2
Self-support...	4,152	25.8	858	30.3
Industrial engineering:				
Total, all sources...	3,973	100.0	1,098	100.0
Federal, total...	485	12.2	118	10.7
Dept. of Defense...	172	4.3	21	1.9
Dept. of HHS, total...	20	0.5	16	1.5
NIH...	17	0.4	13	1.2
Other HHS...	3	0.1	3	0.3
NASA...	15	0.4	8	0.7
NSF...	116	2.9	29	2.6
USDA...	1	0.0	0	0.0
All other Federal...	161	4.1	44	4.0
Institutional support...	1,310	33.0	387	35.2
Other outside support, total...	410	10.3	91	8.3
All other U.S...	328	8.3	76	6.9
Foreign...	82	2.1	15	1.4
Self-support...	1,768	44.5	502	45.7

See explanatory information and SOURCES at end of table.

**Appendix table 3-16. Full-time graduate students in science and engineering,
by sex, field and primary source of support: 1997**

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Field and primary source of support	Men		Women	
	Number	Percent	Number	Percent
Mechanical engineering:				
Total, all sources...	9,143	100.0	1,289	100.0
Federal, total...	2,255	24.7	357	27.7
Dept. of Defense...	664	7.3	93	7.2
Dept. of HHS, total...	83	0.9	26	2.0
NIH...	57	0.6	13	1.0
Other HHS...	26	0.3	13	1.0
NASA...	249	2.7	42	3.3
NSF...	714	7.8	122	9.5
USDA...	12	0.1	0	0.0
All other Federal...	533	5.8	74	5.7
Institutional support...	3,460	37.8	473	36.7
Other outside support, total...	1,297	14.2	160	12.4
All other U.S...	1,139	12.5	144	11.2
Foreign...	158	1.7	16	1.2
Self-support...	2,131	23.3	299	23.2
Other engineering:				
Total, all sources...	11,099	100.0	3,023	100.0
Federal, total...	3,882	35.0	907	30.0
Dept. of Defense...	1,295	11.7	180	6.0
Dept. of HHS, total...	340	3.1	126	4.2
NIH...	314	2.8	117	3.9
Other HHS...	26	0.2	9	0.3
NASA...	431	3.9	86	2.8
NSF...	802	7.2	242	8.0
USDA...	84	0.8	37	1.2
All other Federal...	930	8.4	236	7.8
Institutional support...	3,448	31.1	1,050	34.7
Other outside support, total...	1,630	14.7	432	14.3
All other U.S...	1,270	11.4	377	12.5
Foreign...	360	3.2	55	1.8
Self-support...	2,139	19.3	634	21.0

SOURCE: National Science Foundation/Division of Science Resources Studies, Survey of Graduate Students and Postdoctorates in Science and Engineering.

Women, Minorities, and Persons With Disabilities in Science and Engineering: 2000

**Appendix table 3-17. Percentage of full-time full-year science and engineering graduate students who received various forms of financial support, by race/ethnicity: 1996
[U.S. citizens and permanent residents only]**

Race/ethnicity	Any aid	Loans	Grants	Research assistantship	Teaching assistantship
Total.....	82.8	33.4	51.6	15.7	20.3
White, non-Hispanic.....	87.5	35.6	50.6	13.0	18.6
Asian/Pacific Islander.....	72.0	21.2	49.9	33.9	41.7
Underrepresented minority ¹	74.1	42.7	62.1	18.7	10.9

¹ Underrepresented minority includes American Indian/Alaskan Native; black, non-Hispanic; and Hispanic.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1995–96 National Postsecondary Student Aid Study (NPSAS:96), in National Science Foundation/Division of Science Resources Studies, *Financial Aid Profile of Graduate Students in Science and Engineering* (forthcoming).

Appendix table 4-1. Master's degrees awarded, by major field group: 1966-96

Year	All fields	Science & engineering fields								All other fields	
		Total, science and engineering	Engi- neering	Physical sciences	Earth, atmo- spheric, & ocean sciences	Mathe- matics	Computer science	Biological/ agricultural sciences	Psych- ology		
1966	140,772	41,049	13,705	4,206	759	4,772	238	5,865	2,423	9,081	99,723
1967	157,892	44,988	13,921	4,405	971	5,284	449	6,712	2,898	10,348	112,904
1968	177,150	48,760	15,232	4,456	1,008	5,533	548	7,309	3,240	11,434	128,390
1969	194,414	52,382	15,248	4,755	1,124	5,723	1,012	7,799	3,738	12,983	142,032
1970	209,387	53,695	15,597	4,796	1,124	5,648	1,459	7,619	3,962	13,490	155,692
1971	231,486	56,454	16,367	5,115	1,227	5,201	1,588	7,604	4,438	14,914	175,032
1972	252,774	60,049	16,764	4,864	1,408	5,209	1,977	8,200	5,293	16,334	192,725
1973	264,525	62,046	16,545	4,769	1,470	5,033	2,113	8,514	5,882	17,720	202,479
1974	278,259	62,239	15,205	4,379	1,679	4,840	2,276	8,866	6,616	18,378	216,020
1975	293,651	63,198	15,167	4,298	1,503	4,338	2,299	9,030	7,104	19,459	230,453
1976	313,001	65,007	16,045	3,880	1,581	3,863	2,603	9,223	7,859	19,953	247,994
1977	318,241	67,397	16,012	3,641	1,659	3,698	2,798	10,060	8,320	21,209	250,844
1978	312,816	67,264	16,080	3,713	1,832	3,383	3,038	10,001	8,194	21,023	245,552
1979	302,075	64,226	15,279	3,650	1,777	3,046	3,055	10,016	8,031	19,372	237,849
1980	299,095	64,089	15,943	3,408	1,793	2,868	3,647	9,631	7,861	18,938	235,006
1981	296,798	64,366	16,451	3,366	1,876	2,569	4,218	9,107	8,039	18,740	232,432
1982	296,580	66,568	17,557	3,491	2,012	2,731	4,935	9,199	7,849	18,794	230,012
1983	290,931	67,733	18,886	3,285	1,959	2,856	5,321	9,136	8,439	17,851	223,198
1984	285,462	68,582	20,145	3,544	1,982	2,770	6,190	8,702	8,073	17,176	216,880
1985	287,213	70,578	20,972	3,605	2,160	2,903	7,101	8,208	8,481	17,148	216,635
1986	289,829	71,840	21,096	3,649	2,234	3,184	8,070	8,023	8,363	17,221	217,989
1987	290,532	72,603	22,070	3,574	2,051	3,327	8,481	7,775	8,165	17,160	217,929
1988	300,091	73,655	22,726	3,708	1,920	3,434	9,166	7,556	7,925	17,220	226,436
1989	311,050	76,425	23,743	3,876	1,819	3,430	9,399	7,523	8,652	17,983	234,625
1990	324,947	77,788	23,995	3,805	1,596	3,684	9,643	7,527	9,308	18,230	247,159
1991	338,498	78,368	24,013	3,777	1,499	3,632	9,324	7,406	9,802	18,915	260,130
1992	354,207	81,107	25,018	3,922	1,425	3,665	9,655	7,885	9,852	19,685	273,100
1993	370,973	86,425	27,664	3,965	1,397	3,751	10,349	8,112	10,412	20,775	284,548
1994	389,008	91,411	28,717	4,263	1,418	3,804	10,546	8,686	11,572	22,405	297,597
1995	399,428	94,309	28,630	4,241	1,483	3,932	10,563	9,069	13,132	23,259	305,119
1996	408,932	95,313	27,761	4,364	1,487	3,742	10,613	10,307	13,043	23,996	313,619

NOTE: For the years 1966-70 the science and engineering total includes degrees granted for "other" sciences; these degrees are not included in any of the specific categories. These degrees constitute less than 2 percent of the total.

SOURCE: Tabulations by National Science Foundation/Division of Science Resources Studies; data from U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Completions Survey.

Appendix table 4-2. Master's degrees awarded to women, by major field group: 1966–96

Year	All fields	Science & engineering fields								All other fields	Index of dissimilarity ¹
		Total, science and engineering	Engineering	Physical sciences	Earth, atmospheric, & ocean sciences	Mathematics	Computer science	Biological/agricultural sciences	Psychology		
1966	47,588	5,469	76	483	45	1,001	17	1,219	798	1,830	42,119
1967	54,713	6,306	78	498	55	1,284	26	1,353	927	2,085	48,407
1968	63,401	7,209	99	564	71	1,331	30	1,631	1,011	2,472	56,192
1969	72,533	8,200	113	579	89	1,493	73	1,766	1,154	2,933	64,333
1970	83,241	9,722	169	722	125	1,674	135	1,964	1,478	3,455	73,519
1971	92,896	10,338	186	736	116	1,524	164	2,058	1,651	3,903	82,558
1972	102,689	11,328	271	736	152	1,552	225	2,186	2,033	4,173	91,361
1973	109,525	11,813	278	669	176	1,505	225	2,108	2,367	4,485	97,712
1974	119,915	12,711	347	690	197	1,500	293	2,233	2,630	4,821	107,204
1975	131,536	13,788	372	653	194	1,428	338	2,275	3,045	5,483	117,748
1976	145,256	15,015	568	605	220	1,313	377	2,471	3,671	5,790	130,241
1977	150,031	16,498	698	660	226	1,300	466	2,841	4,004	6,303	133,533
1978	151,108	17,230	843	653	290	1,150	567	3,020	4,263	6,444	133,878
1979	148,303	17,612	937	679	310	1,057	575	3,231	4,343	6,480	130,691
1980	147,936	18,085	1,123	638	336	1,036	764	3,129	4,464	6,595	129,851
1981	149,367	18,861	1,329	675	406	877	971	3,046	4,668	6,889	130,506
1982	150,639	20,011	1,575	747	452	910	1,310	3,303	4,621	7,093	130,628
1983	145,817	20,999	1,755	685	444	985	1,508	3,433	5,185	7,004	124,818
1984	141,464	21,533	2,100	846	465	964	1,811	3,399	5,093	6,855	119,931
1985	143,497	22,331	2,244	830	521	1,016	2,037	3,327	5,417	6,939	121,166
1986	145,897	23,219	2,400	913	517	1,118	2,412	3,344	5,426	7,089	122,678
1987	148,877	23,844	2,770	890	520	1,301	2,496	3,338	5,327	7,202	125,033
1988	154,688	23,835	2,808	891	487	1,377	2,464	3,244	5,326	7,238	130,853
1989	161,651	25,580	3,082	1,040	482	1,370	2,626	3,313	5,838	7,829	136,071
1990	170,922	26,558	3,269	1,051	378	1,476	2,675	3,447	6,283	7,979	144,364
1991	181,603	27,927	3,357	1,074	383	1,486	2,761	3,431	6,808	8,627	153,676
1992	191,908	28,950	3,669	1,088	368	1,446	2,675	3,658	6,923	9,123	162,958
1993	201,220	30,971	4,094	1,171	391	1,532	2,795	3,731	7,484	9,773	170,249
1994	212,246	33,441	4,423	1,233	424	1,493	2,729	4,171	8,285	10,683	178,805
1995	220,230	35,791	4,632	1,283	451	1,579	2,786	4,329	9,397	11,334	184,439
1996	228,572	37,453	4,752	1,450	436	1,506	2,850	5,048	9,373	12,038	191,119

¹ The dissimilarity index is a measure of the percentage of women master's recipients who would need to switch fields of study to match the percentage distribution of men receiving master's degrees. The index is calculated as the sum of the absolute difference between the percentage of women master's degree recipients earning degrees in each field and the percentage of men master's degree recipients earning degrees in each field divided by 2.

NOTE: For the years 1966–70 the science and engineering total includes degrees granted for "other" sciences; these degrees are not included in any of the specific categories. These degrees constitute less than 2 percent of the total.

SOURCE: Tabulations by National Science Foundation/Division of Science Resources Studies; data from U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Completions Survey.

Appendix table 4-3. Women as a percentage of all master's degree recipients, by major field group: 1966–96

Year	All fields	Science & engineering fields									All other fields
		Total, science and engineering	Engineering	Physical sciences	Earth, atmospheric, & ocean sciences	Mathematics	Computer science	Biological/agricultural sciences	Psychology	Social sciences	
1966	33.8	13.3	0.6	11.5	5.9	21.0	7.1	20.8	32.9	20.2	42.2
1967	34.7	14.0	0.6	11.3	5.7	24.3	5.8	20.2	32.0	20.1	42.9
1968	35.8	14.8	0.6	12.7	7.0	24.1	5.5	22.3	31.2	21.6	43.8
1969	37.3	15.7	0.7	12.2	7.9	26.1	7.2	22.6	30.9	22.6	45.3
1970	39.8	18.1	1.1	15.1	11.1	29.6	9.3	25.8	37.3	25.6	47.2
1971	40.1	18.3	1.1	14.4	9.5	29.3	10.3	27.1	37.2	26.2	47.2
1972	40.6	18.9	1.6	15.1	10.8	29.8	11.4	26.7	38.4	25.5	47.4
1973	41.4	19.0	1.7	14.0	12.0	29.9	10.6	24.8	40.2	25.3	48.3
1974	43.1	20.4	2.3	15.8	11.7	31.0	12.9	25.2	39.8	26.2	49.6
1975	44.8	21.8	2.5	15.2	12.9	32.9	14.7	25.2	42.9	28.2	51.1
1976	46.4	23.1	3.5	15.6	13.9	34.0	14.5	26.8	46.7	29.0	52.5
1977	47.1	24.5	4.4	18.1	13.6	35.2	16.7	28.2	48.1	29.7	53.2
1978	48.3	25.6	5.2	17.6	15.8	34.0	18.7	30.2	52.0	30.7	54.5
1979	49.1	27.4	6.1	18.6	17.4	34.7	18.8	32.3	54.1	33.5	54.9
1980	49.5	28.2	7.0	18.7	18.7	36.1	20.9	32.5	56.8	34.8	55.3
1981	50.3	29.3	8.1	20.1	21.6	34.1	23.0	33.4	58.1	36.8	56.1
1982	50.8	30.1	9.0	21.4	22.5	33.3	26.5	35.9	58.9	37.7	56.8
1983	50.1	31.0	9.3	20.9	22.7	34.5	28.3	37.6	61.4	39.2	55.9
1984	49.6	31.4	10.4	23.9	23.5	34.8	29.3	39.1	63.1	39.9	55.3
1985	50.0	31.6	10.7	23.0	24.1	35.0	28.7	40.5	63.9	40.5	55.9
1986	50.3	32.3	11.4	25.0	23.1	35.1	29.9	41.7	64.9	41.2	56.3
1987	51.2	32.8	12.6	24.9	25.4	39.1	29.4	42.9	65.2	42.0	57.4
1988	51.5	32.4	12.4	24.0	25.4	40.1	26.9	42.9	67.2	42.0	57.8
1989	52.0	33.5	13.0	26.8	26.5	39.9	27.9	44.0	67.5	43.5	58.0
1990	52.6	34.1	13.6	27.6	23.7	40.1	27.7	45.8	67.5	43.8	58.4
1991	53.6	35.6	14.0	28.4	25.6	40.9	29.6	46.3	69.5	45.6	59.1
1992	54.2	35.7	14.7	27.7	25.8	39.5	27.7	46.4	70.3	46.3	59.7
1993	54.2	35.8	14.8	29.5	28.0	40.8	27.0	46.0	71.9	47.0	59.8
1994	54.6	36.6	15.4	28.9	29.9	39.2	25.9	48.0	71.6	47.7	60.1
1995	55.1	38.0	16.2	30.3	30.4	40.2	26.4	47.7	71.6	48.7	60.4
1996	55.9	39.3	17.1	33.2	29.3	40.2	26.9	49.0	71.9	50.2	60.9

NOTE: For the years 1966–70 the science and engineering total includes degrees granted for "other" sciences; these degrees are not included in any of the specific categories. These degrees constitute less than 2 percent of the total.

SOURCE: Tabulations by National Science Foundation/Division of Science Resources Studies; data from U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Completions Survey.

Appendix table 4-4. Master's degrees in science and engineering, by citizenship, field, and race/ethnicity of recipient: 1989–96

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Field	1989	1990	1991	1992	1993	1994	1995	1996
Total, all recipients								
Total, all fields...	311,050	324,947	338,498	354,207	370,973	389,008	399,428	408,932
Total science and engineering...	70,333	72,228	72,828	76,184	81,415	86,080	88,431	88,730
Physical sciences ¹ ...	5,703	5,411	5,282	5,352	5,365	5,688	5,735	5,854
Mathematical sciences...	3,430	3,684	3,632	4,019	4,084	4,108	4,190	4,037
Computer science...	9,399	9,643	9,324	9,530	10,167	10,421	10,332	10,223
Biological sciences...	4,953	4,893	4,806	4,816	4,798	5,217	5,423	6,207
Agricultural sciences...	2,604	2,662	2,625	3,058	3,299	3,435	3,612	4,032
Social sciences...	11,857	12,642	13,350	14,119	15,024	16,230	16,501	16,758
Psychology...	8,652	9,308	9,802	10,280	11,020	12,274	14,021	13,862
Engineering...	23,735	23,985	24,007	25,010	27,658	28,707	28,617	27,757
Non-S&E ² ...	240,717	252,719	265,670	278,023	289,558	302,928	310,997	320,202
U.S. citizens and permanent residents, total ³								
Total, all fields...	278,927	290,345	300,887	314,555	326,864	342,502	350,672	360,682
Total science and engineering...	55,190	55,890	55,779	58,177	61,265	65,201	67,110	68,151
Physical sciences ¹ ...	4,465	4,047	3,778	3,814	3,763	3,918	3,980	4,119
Mathematical sciences...	2,454	2,649	2,573	2,907	2,946	3,013	3,034	2,956
Computer science...	6,957	7,080	6,505	6,361	6,388	6,509	6,452	6,352
Biological sciences...	4,317	4,164	4,057	4,021	3,949	4,284	4,543	5,230
Agricultural sciences...	1,974	2,023	2,022	2,356	2,605	2,727	2,948	3,371
Social sciences...	9,642	10,258	10,872	11,629	12,387	13,487	13,695	13,938
Psychology...	8,393	8,923	9,485	9,978	10,688	11,913	13,537	13,423
Engineering...	16,988	16,746	16,487	17,111	18,539	19,350	18,921	18,762
Non-S&E ² ...	223,737	234,455	245,108	256,378	265,599	277,301	283,562	292,531
White, non-Hispanics								
Total, all fields...	230,322	236,874	247,524	257,062	265,668	273,913	277,437	282,713
Total science and engineering...	43,945	44,450	44,513	45,649	47,975	50,711	51,417	51,791
Physical sciences ¹ ...	3,766	3,401	3,129	3,067	3,078	3,145	3,179	3,326
Mathematical sciences...	2,032	2,169	2,068	2,336	2,354	2,379	2,342	2,227
Computer science...	4,786	4,851	4,637	4,407	4,464	4,286	4,205	4,113
Biological sciences...	3,679	3,501	3,353	3,251	3,144	3,453	3,589	4,080
Agricultural sciences...	1,817	1,820	1,818	2,075	2,282	2,261	2,474	2,926
Social sciences...	7,958	8,360	8,900	9,523	9,923	10,758	10,700	10,807
Psychology...	7,075	7,489	7,973	8,238	8,810	9,960	11,107	10,739
Engineering...	12,832	12,859	12,635	12,752	13,920	14,469	13,821	13,573
Non-S&E ² ...	186,377	192,424	203,011	211,413	217,693	223,202	226,020	230,922

See explanatory information and SOURCE at end of table.

Appendix table 4-4. Master's degrees in science and engineering, by citizenship, field, and race/ethnicity of recipient: 1989–96

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Field	1989	1990	1991	1992	1993	1994	1995	1996
Asians/Pacific Islanders								
Total, all fields...	10,174	9,994	11,070	12,293	13,169	14,559	15,906	17,281
Total science and engineering...	4,100	4,055	4,310	4,763	4,846	5,422	5,683	5,942
Physical sciences ¹ ...	278	234	251	295	249	284	288	304
Mathematical sciences...	178	184	189	201	197	233	239	235
Computer science...	894	941	1,014	1,105	1,106	1,228	1,239	1,237
Biological sciences...	223	225	231	264	305	332	417	519
Agricultural sciences...	44	45	50	51	61	82	97	110
Social sciences...	360	404	397	441	477	550	533	586
Psychology...	131	159	170	183	191	270	298	330
Engineering...	1,992	1,863	2,008	2,223	2,260	2,443	2,572	2,621
Non-S&E ² ...	6,074	5,939	6,760	7,530	8,323	9,137	10,223	11,339
Index of dissimilarity...	23.4	23.7	22.9	23.2	21.1	20.9	20.1	18.8
Black, non-Hispanics								
Total, all fields...	13,455	14,473	15,857	17,420	18,897	20,936	22,954	24,588
Total science and engineering...	1,652	1,847	2,090	2,356	2,554	2,849	3,339	3,518
Physical sciences ¹ ...	78	87	73	98	105	127	147	116
Mathematical sciences...	59	70	100	77	98	109	151	151
Computer science...	198	232	283	316	308	365	347	379
Biological sciences...	124	110	137	149	135	142	162	198
Agricultural sciences...	36	28	51	59	70	78	74	88
Social sciences...	407	462	594	660	730	803	930	965
Psychology...	395	471	454	531	544	636	863	947
Engineering...	355	387	398	466	564	589	665	674
Non-S&E ² ...	11,803	12,626	13,767	15,064	16,343	18,087	19,615	21,070
Index of dissimilarity...	6.8	6.1	5.0	4.4	4.7	5.1	4.2	4.3
Hispanics								
Total, all fields...	8,133	8,495	9,684	10,256	11,371	13,177	13,905	15,394
Total science and engineering...	1,585	1,587	1,736	1,806	2,092	2,514	2,585	2,730
Physical sciences ¹ ...	92	98	96	93	114	114	129	127
Mathematical sciences...	34	51	85	66	78	75	75	91
Computer science...	144	118	128	149	162	169	198	173
Biological sciences...	126	120	136	146	151	138	167	191
Agricultural sciences...	48	44	49	49	69	184	96	95
Social sciences...	313	341	383	396	474	557	553	596
Psychology...	360	369	391	419	463	558	656	709
Engineering...	468	446	468	488	581	719	711	748
Non-S&E ² ...	6,548	6,908	7,948	8,450	9,279	10,663	11,320	12,664
Index of dissimilarity...	1.9	1.8	1.3	1.3	1.3	1.6	1.0	1.5

See explanatory information and SOURCE at end of table.

Appendix table 4-4. Master's degrees in science and engineering, by citizenship, field, and race/ethnicity of recipient: 1989-96

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Field	1989	1990	1991	1992	1993	1994	1995	1996
American Indians/Alaskan Natives								
Total, all fields...	1,082	1,050	1,125	1,228	1,344	1,618	1,542	1,693
Total science and engineering...	209	181	200	198	253	273	299	304
Physical sciences ¹	18	9	13	18	12	16	19	10
Mathematical sciences...	6	6	9	4	8	6	11	6
Computer science...	39	7	14	15	14	18	16	24
Biological sciences...	17	14	13	12	26	17	20	17
Agricultural sciences...	6	8	8	7	8	11	13	14
Social sciences...	57	65	54	62	78	83	92	97
Psychology...	33	37	49	38	57	62	85	80
Engineering...	33	35	40	42	50	60	43	56
Non-S&E ²	873	869	925	1,030	1,091	1,345	1,243	1,389
Index of dissimilarity...	3.4	4.3	2.5	3.1	3.6	3.0	3.7	2.9
U.S. citizens and permanent residents, unknown race/ethnicity								
Total, all fields...	15,761	19,459	15,627	16,296	16,415	18,299	18,928	19,013
Total science and engineering...	3,699	3,770	2,930	3,405	3,545	3,432	3,787	3,866
Physical sciences ¹	233	218	216	243	205	232	218	236
Mathematical sciences...	145	169	122	223	211	211	216	246
Computer science...	896	931	429	369	334	443	447	426
Biological sciences...	148	194	187	199	188	202	188	225
Agricultural sciences...	23	78	46	115	115	111	194	138
Social sciences...	547	626	544	547	705	736	887	887
Psychology...	399	398	448	569	623	427	528	618
Engineering...	1,308	1,156	938	1,140	1,164	1,070	1,109	1,090
Non-S&E ²	12,062	15,689	12,697	12,891	12,870	14,867	15,141	15,147
Index of dissimilarity...	6.4	3.2	1.9	3.6	3.7	1.9	3.0	3.1
Nonresident aliens ⁴								
Total, all fields...	32,123	34,602	37,611	39,652	44,109	46,506	48,756	48,250
Total science and engineering...	15,143	16,338	17,049	18,007	20,150	20,879	21,321	20,579
Physical sciences ¹	1,238	1,364	1,504	1,538	1,602	1,770	1,755	1,735
Mathematical sciences...	976	1,035	1,059	1,112	1,138	1,095	1,156	1,081
Computer science...	2,442	2,563	2,819	3,169	3,779	3,912	3,880	3,871
Biological sciences...	636	729	749	795	849	933	880	977
Agricultural sciences...	630	639	603	702	694	708	664	661
Social sciences...	2,215	2,384	2,478	2,490	2,637	2,743	2,806	2,820
Psychology...	259	385	317	302	332	361	484	439
Engineering...	6,747	7,239	7,520	7,899	9,119	9,357	9,696	8,995
Non-S&E ²	16,980	18,264	20,562	21,645	23,959	25,627	27,435	27,671

See explanatory information and SOURCE at end of table.

Appendix table 4-4. Master's degrees in science and engineering, by citizenship, field, and race/ethnicity of recipient: 1989–96

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¹ In this table, "Physical science" includes earth, atmospheric, and ocean sciences, as well as physics, astronomy, and chemistry.

² Non-S&E refers to non-science and non-engineering.

³ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

⁴ The dissimilarity index is a measure of the percentage of master's degree recipients in a racial/ethnic group who would need to switch fields of study to match the percentage distribution by field of white students receiving master's degrees. The index is calculated as the sum of the absolute difference between the percentage of degree recipients in a particular racial/ethnic group earning master's degrees in each field and the percentage of white degree recipients earning master's degrees in each field divided by 2.

⁵ Nonresident aliens include foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTE: Data on race/ethnicity of degree recipients were collected on broad fields of study only until 1994; therefore, these trend data could not be adjusted to the exact field taxonomies used by NSF.

SOURCE: Tabulations by National Science Foundation/Division of Science Resource Studies; data from U.S. Department of Education, National Center for Education Statistic, Integrated Postsecondary Education Data System, Completions Survey.

Women, Minorities, and Persons With Disabilities in Science and Engineering: 2000

Appendix table 4-5. Master's degrees, by detailed field and race/ethnicity of recipient: 1996

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Field	Total, all recipients	U.S. citizens and permanent residents ¹							Non-resident aliens ²
		Total	White, non-Hispanics	Asians/ Pacific Islanders	Black, non-Hispanics	Hispanics	American Indians/ Alaskan Natives	Unknown	
Total, all fields...	408,932	360,682	282,713	17,281	24,588	15,394	1,693	19,013	48,250
Sciences...	67,552	54,870	41,773	3,707	3,746	2,342	265	3,037	12,682
Natural sciences...	30,513	22,199	16,809	2,445	983	692	72	1,198	8,314
Physical sciences ³ ...	5,851	4,117	3,324	304	116	127	10	236	1,734
Astronomy...	115	94	79	7	1	4	0	3	21
Chemistry...	2,273	1,468	1,099	180	65	46	3	75	805
Physics...	1,686	1,082	866	77	32	39	2	66	604
Earth, atmospheric, & ocean sciences...	1,487	1,238	1,074	37	11	27	5	84	249
Atmospheric sciences...	199	163	148	6	0	1	0	8	36
Geosciences...	1,146	962	853	28	9	25	4	43	184
Oceanography...	142	113	73	3	2	1	1	33	29
Other physical sciences...	290	235	206	3	7	11	0	8	55
Mathematics...	3,742	2,712	2,083	220	145	88	5	171	1,030
Computer sciences...	10,613	6,712	4,353	1,283	435	188	26	427	3,901
Biological sciences...	6,286	5,295	4,131	528	199	194	17	226	991
Biology, general...	2,648	2,326	1,810	179	103	113	11	110	322
Biochemistry & biophysics...	319	219	140	53	9	5	0	12	100
Botany...	228	189	164	6	4	4	0	11	39
Cell & molecular biology...	181	145	99	28	4	6	2	6	36
Microbiology/bacteriology...	324	250	185	39	8	9	0	9	74
Zoology...	815	693	558	90	16	15	0	14	122
Biological sciences, other...	1,692	1,408	1,124	124	54	39	4	63	284
Agricultural sciences...	4,021	3,363	2,918	110	88	95	14	138	658
Psychology...	13,043	12,619	10,071	322	870	667	78	611	424
Psychology, general...	4,794	4,615	3,772	150	225	212	24	232	179
Clinical psychology...	1,411	1,374	1,129	35	50	67	6	87	37
Counseling psychology...	4,317	4,197	3,348	93	263	278	28	187	120
Industrial & organizational psychology...	844	816	569	15	167	46	4	15	28
Psychology, other...	1,677	1,617	1,253	29	165	64	16	90	60
Social sciences...	23,996	20,052	14,893	940	1,893	983	115	1,228	3,944
Economics...	2,964	1,620	1,205	144	96	64	3	108	1,344
Political science...	13,370	11,580	8,551	500	1,198	593	48	690	1,790
Sociology...	1,822	1,647	1,160	65	261	87	20	54	175
Other social sciences...	5,840	5,205	3,977	231	338	239	44	376	635
Engineering...	27,761	18,765	13,576	2,621	674	748	56	1,090	8,996
Aeronautical/astronautical engineering...	774	576	427	48	10	10	5	76	198
Chemical engineering...	1,416	820	605	98	33	43	4	37	596
Civil engineering...	5,002	3,664	2,849	381	116	147	9	162	1,338
Electrical engineering...	8,156	4,994	3,165	1,096	192	208	15	318	3,162
Industrial engineering...	3,027	2,044	1,479	196	112	130	3	124	983
Materials/metallurgical engineering...	774	501	396	51	9	21	2	22	273
Mechanical engineering...	4,009	2,806	2,119	328	85	98	11	165	1,203
Other engineering...	4,603	3,360	2,536	423	117	91	7	186	1,243
Non-S&E ⁴ ...	313,611	287,039	227,356	10,953	20,168	12,304	1,372	14,886	26,572

See explanatory information and SOURCE at end of table.

Appendix table 4-5. Master's degrees, by detailed field and race/ethnicity of recipient: 1996

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¹ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

² Nonresident aliens include foreign citizens on temporary visas only.

³ In this table, "Physical science" includes earth, atmospheric, and ocean sciences, as well as physics, astronomy, and chemistry.

⁴ Non-S&E refers to non-science and non-engineering.

NOTE: Racial/ethnic data were collected by broad fields of study only until 1994; therefore, data could not be adjusted to the exact field taxonomies used by NSF. Because data were collected by detailed field in 1996 (as well as in 1995) the data in this table do correspond to the field taxonomies used by NSF and therefore will match other tables in this report showing master's degrees by sex, but will not match data shown in other tables in this report showing master's degrees by race/ethnicity over time. The largest effect is in the social sciences: NSF excludes history and includes public administration and public policy, linguistics, gerontology, and agricultural economics in this category.

SOURCE: Tabulations by National Science Foundation/Division of Science Resources Studies; data from U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Completions Survey.

Women, Minorities, and Persons With Disabilities in Science and Engineering: 2000

Appendix table 4-6. Percentage distribution of master's degrees in science and engineering to U.S. citizens and permanent residents, by field and by race/ethnicity of recipient: 1989–96

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Field	1989	1990	1991	1992	1993	1994	1995	1996
U.S. citizens and permanent residents, total ³								
Total, all fields...	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total science and engineering...	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Physical sciences ¹ ...	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mathematical sciences...	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Computer science...	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Biological sciences...	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Agricultural sciences...	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Social sciences...	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Psychology...	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Engineering...	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Non-S&E ² ...	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
White, non-Hispanics								
Total, all fields...	82.6	81.6	82.3	81.7	81.3	80.0	79.1	78.4
Total science and engineering...	79.6	79.5	79.8	78.5	78.3	77.8	76.6	76.0
Physical sciences ¹ ...	84.3	84.0	82.8	80.4	81.8	80.3	79.9	80.7
Mathematical sciences...	82.8	81.9	80.4	80.4	79.9	79.0	77.2	75.3
Computer science...	68.8	68.5	71.3	69.3	69.9	65.8	65.2	64.8
Biological sciences...	85.2	84.1	82.6	80.9	79.6	80.6	79.0	78.0
Agricultural sciences...	92.0	90.0	89.9	88.1	87.6	82.9	83.9	86.8
Social sciences...	82.5	81.5	81.9	81.9	80.1	79.8	78.1	77.5
Psychology...	84.3	83.9	84.1	82.6	82.4	83.6	82.0	80.0
Engineering...	75.5	76.8	76.6	74.5	75.1	74.8	73.0	72.3
Non-S&E ² ...	83.3	82.1	82.8	82.5	82.0	80.5	79.7	78.9
Asians/Pacific Islanders								
Total, all fields...	3.6	3.4	3.7	3.9	4.0	4.3	4.5	4.8
Total science and engineering...	7.4	7.3	7.7	8.2	7.9	8.3	8.5	8.7
Physical sciences ¹ ...	6.2	5.8	6.6	7.7	6.6	7.2	7.2	7.4
Mathematical sciences...	7.3	6.9	7.3	6.9	6.7	7.7	7.9	7.9
Computer science...	12.9	13.3	15.6	17.4	17.3	18.9	19.2	19.5
Biological sciences...	5.2	5.4	5.7	6.6	7.7	7.7	9.2	9.9
Agricultural sciences...	2.2	2.2	2.5	2.2	2.3	3.0	3.3	3.3
Social sciences...	3.7	3.9	3.7	3.8	3.9	4.1	3.9	4.2
Psychology...	1.6	1.8	1.8	1.8	1.8	2.3	2.2	2.5
Engineering...	11.7	11.1	12.2	13.0	12.2	12.6	13.6	14.0
Non-S&E ² ...	2.7	2.5	2.8	2.9	3.1	3.3	3.6	3.9

See explanatory information and SOURCE at end of table.

Appendix table 4-6. Percentage distribution of master's degrees in science and engineering to U.S. citizens and permanent residents, by field and by race/ethnicity of recipient: 1989-96

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Field	1989	1990	1991	1992	1993	1994	1995	1996
Black, non-Hispanics								
Total, all fields...	4.8	5.0	5.3	5.5	5.8	6.1	6.5	6.8
Total science and engineering...	3.0	3.3	3.7	4.0	4.2	4.4	5.0	5.2
Physical sciences ¹	1.7	2.1	1.9	2.6	2.8	3.2	3.7	2.8
Mathematical sciences...	2.4	2.6	3.9	2.6	3.3	3.6	5.0	5.1
Computer science...	2.8	3.3	4.4	5.0	4.8	5.6	5.4	6.0
Biological sciences...	2.9	2.6	3.4	3.7	3.4	3.3	3.6	3.8
Agricultural sciences...	1.8	1.4	2.5	2.5	2.7	2.9	2.5	2.6
Social sciences...	4.2	4.5	5.5	5.7	5.9	6.0	6.8	6.9
Psychology...	4.7	5.3	4.8	5.3	5.1	5.3	6.4	7.1
Engineering...	2.1	2.3	2.4	2.7	3.0	3.0	3.5	3.6
Non-S&E ²	5.3	5.4	5.6	5.9	6.2	6.5	6.9	7.2
Hispanics								
Total, all fields...	2.9	2.9	3.2	3.3	3.5	3.8	4.0	4.3
Total science and engineering...	2.9	2.8	3.1	3.1	3.4	3.9	3.9	4.0
Physical sciences ¹	2.1	2.4	2.5	2.4	3.0	2.9	3.2	3.1
Mathematical sciences...	1.4	1.9	3.3	2.3	2.6	2.5	2.5	3.1
Computer science...	2.1	1.7	2.0	2.3	2.5	2.6	3.1	2.7
Biological sciences...	2.9	2.9	3.4	3.6	3.8	3.2	3.7	3.7
Agricultural sciences...	2.4	2.2	2.4	2.1	2.6	6.7	3.3	2.8
Social sciences...	3.2	3.3	3.5	3.4	3.8	4.1	4.0	4.3
Psychology...	4.3	4.1	4.1	4.2	4.3	4.7	4.8	5.3
Engineering...	2.8	2.7	2.8	2.9	3.1	3.7	3.8	4.0
Non-S&E ²	2.9	2.9	3.2	3.3	3.5	3.8	4.0	4.3
American Indians/Alaskan Natives								
Total, all fields...	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.5
Total science and engineering...	0.4	0.3	0.4	0.3	0.4	0.4	0.4	0.4
Physical sciences ¹	0.4	0.2	0.3	0.5	0.3	0.4	0.5	0.2
Mathematical sciences...	0.2	0.2	0.3	0.1	0.3	0.2	0.4	0.2
Computer science...	0.6	0.1	0.2	0.2	0.2	0.3	0.2	0.4
Biological sciences...	0.4	0.3	0.3	0.3	0.7	0.4	0.4	0.3
Agricultural sciences...	0.3	0.4	0.4	0.3	0.3	0.4	0.4	0.4
Social sciences...	0.6	0.6	0.5	0.5	0.6	0.6	0.7	0.7
Psychology...	0.4	0.4	0.5	0.4	0.5	0.5	0.6	0.6
Engineering...	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.3
Non-S&E ²	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.5

See explanatory information and SOURCE at end of table.

Appendix table 4-6. Percentage distribution of master's degrees in science and engineering to U.S. citizens and permanent residents, by field and by race/ethnicity of recipient: 1989–96

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Field	1989	1990	1991	1992	1993	1994	1995	1996
U.S. citizens and permanent residents, unknown race/ethnicity								
Total, all fields...	5.7	6.7	5.2	5.2	5.0	5.3	5.4	5.3
Total science and engineering...	6.7	6.7	5.3	5.9	5.8	5.3	5.6	5.7
Physical sciences ¹	5.2	5.4	5.7	6.4	5.4	5.9	5.5	5.7
Mathematical sciences...	5.9	6.4	4.7	7.7	7.2	7.0	7.1	8.3
Computer science...	12.9	13.1	6.6	5.8	5.2	6.8	6.9	6.7
Biological sciences...	3.4	4.7	4.6	4.9	4.8	4.7	4.1	4.3
Agricultural sciences...	1.2	3.9	2.3	4.9	4.4	4.1	6.6	4.1
Social sciences...	5.7	6.1	5.0	4.7	5.7	5.5	6.5	6.4
Psychology...	4.8	4.5	4.7	5.7	5.8	3.6	3.9	4.6
Engineering...	7.7	6.9	5.7	6.7	6.3	5.5	5.9	5.8
Non-S&E ²	5.4	6.7	5.2	5.0	4.8	5.4	5.3	5.2

¹ In this table, "Physical science" includes earth, atmospheric, and ocean sciences, as well as physics, astronomy, and chemistry.

² Non-S&E refers to non-science and non-engineering.

³ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

NOTE: Data on race/ethnicity of degree recipients were collected on broad fields of study only until 1994; therefore, these trend data could not be adjusted to the exact field taxonomies used by NSF.

SOURCE: Tabulations by National Science Foundation/Division of Science Resources Studies; data from U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Completions Survey.

Appendix table 4-7. Master's degrees awarded to women, by field and by race/ethnicity: 1989-96

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Field	1989	1990	1991	1992	1993	1994	1995	1996
Total, all recipients								
Total, all fields...	161,651	170,922	181,603	191,908	201,220	212,246	220,230	228,572
Total science and engineering...	22,609	23,804	25,080	26,416	28,313	30,619	32,628	33,802
Physical sciences ¹	1,523	1,430	1,457	1,457	1,562	1,658	1,735	1,886
Mathematical sciences.....	1,370	1,476	1,486	1,562	1,616	1,567	1,641	1,569
Computer science.....	2,626	2,675	2,761	2,646	2,756	2,694	2,702	2,723
Biological sciences.....	2,462	2,500	2,491	2,500	2,433	2,742	2,807	3,282
Agricultural sciences.....	858	954	944	1,130	1,270	1,395	1,481	1,708
Social sciences.....	4,851	5,218	5,776	6,180	6,605	7,285	7,520	7,848
Psychology.....	5,838	6,283	6,808	7,276	7,978	8,857	10,111	10,034
Engineering.....	3,081	3,268	3,357	3,665	4,093	4,421	4,631	4,752
Non-S&E ²	139,042	147,118	156,523	165,492	172,907	181,627	187,602	194,770
U.S. citizens and permanent residents, total ³								
Total, all fields...	152,150	160,019	169,142	178,493	185,932	195,881	202,633	210,372
Total science and engineering...	19,509	20,168	21,112	22,114	23,528	25,501	27,326	28,183
Physical sciences ¹	1,239	1,094	1,023	1,030	1,078	1,124	1,202	1,338
Mathematical sciences.....	1,026	1,090	1,110	1,162	1,229	1,210	1,269	1,198
Computer science.....	2,032	2,045	2,086	1,857	1,788	1,730	1,727	1,739
Biological sciences.....	2,183	2,150	2,112	2,090	1,990	2,271	2,379	2,760
Agricultural sciences.....	702	765	765	927	1,062	1,131	1,246	1,448
Social sciences.....	4,107	4,418	4,911	5,218	5,627	6,199	6,431	6,621
Psychology.....	5,678	6,034	6,595	7,069	7,757	8,626	9,775	9,719
Engineering.....	2,542	2,572	2,510	2,761	2,997	3,210	3,297	3,360
Non-S&E ²	132,641	139,851	148,030	156,379	162,404	170,380	175,307	182,189
White, non-Hispanics								
Total, all fields...	126,280	130,799	139,607	146,265	151,951	157,155	160,782	165,154
Total science and engineering...	15,830	16,200	16,879	17,536	18,482	19,865	20,953	21,200
Physical sciences ¹	1,016	883	830	833	849	893	923	1,038
Mathematical sciences.....	859	894	899	947	1,022	959	988	901
Computer science.....	1,356	1,377	1,377	1,171	1,138	977	974	943
Biological sciences.....	1,849	1,790	1,724	1,685	1,551	1,810	1,849	2,122
Agricultural sciences.....	643	682	684	825	925	921	1,024	1,239
Social sciences.....	3,366	3,579	3,919	4,247	4,470	4,878	4,950	5,049
Psychology.....	4,783	5,058	5,553	5,851	6,384	7,190	8,005	7,718
Engineering.....	1,958	1,937	1,893	1,977	2,143	2,237	2,240	2,190
Non-S&E ²	110,450	114,599	122,728	128,729	133,469	137,290	139,829	143,954

See explanatory information and SOURCE at end of table.

Appendix table 4-7. Master's degrees awarded to women, by field and by race/ethnicity: 1989–96

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Field	1989	1990	1991	1992	1993	1994	1995	1996
Asians/Pacific Islanders								
Total, all fields...	4,257	4,324	4,850	5,470	6,044	6,768	7,521	8,404
Total science and engineering...	1,161	1,256	1,351	1,487	1,609	1,861	1,950	2,216
Physical sciences ¹	99	94	86	89	99	102	101	136
Mathematical sciences.....	61	78	81	98	76	107	105	103
Computer science.....	329	332	387	400	396	443	454	462
Biological sciences.....	118	128	127	139	169	181	208	282
Agricultural sciences.....	20	21	23	21	29	47	53	61
Social sciences.....	154	180	201	212	258	274	261	299
Psychology.....	87	117	123	121	141	196	219	252
Engineering.....	293	306	323	407	441	511	549	621
Non-S&E ²	3,096	3,068	3,499	3,983	4,435	4,907	5,571	6,188
Black, non-Hispanics								
Total, all fields...	8,491	9,304	10,238	11,626	12,425	13,929	15,318	16,590
Total science and engineering...	774	897	1,062	1,190	1,301	1,473	1,805	1,953
Physical sciences ¹	22	26	30	32	47	53	61	57
Mathematical sciences.....	27	33	47	33	50	47	87	73
Computer science.....	79	92	133	141	115	160	148	174
Biological sciences.....	65	59	79	88	88	94	112	122
Agricultural sciences.....	12	10	17	23	30	32	39	39
Social sciences.....	201	239	332	345	385	445	512	574
Psychology.....	275	338	325	394	429	475	645	704
Engineering.....	93	100	99	134	157	167	201	210
Non-S&E ²	7,717	8,407	9,176	10,436	11,124	12,456	13,513	14,637
Hispanics								
Total, all fields...	4,536	4,782	5,560	5,875	6,496	7,694	8,180	9,322
Total science and engineering...	615	628	744	740	837	1,087	1,127	1,252
Physical sciences ¹	27	35	23	29	38	34	41	47
Mathematical sciences.....	13	18	33	19	28	31	22	34
Computer science.....	44	25	44	51	58	49	47	48
Biological sciences.....	64	59	82	77	75	73	92	106
Agricultural sciences.....	14	19	18	18	34	79	40	40
Social sciences.....	137	163	187	178	192	267	270	276
Psychology.....	242	236	267	288	311	417	482	533
Engineering.....	74	73	90	80	101	137	133	168
Non-S&E ²	3,921	4,154	4,816	5,135	5,659	6,607	7,053	8,070

See explanatory information and SOURCE at end of table.

Appendix table 4-7. Master's degrees awarded to women, by field and by race/ethnicity: 1989-96

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Field	1989	1990	1991	1992	1993	1994	1995	1996
American Indians/Alaskan Natives								
Total, all fields...	537	526	570	637	664	852	771	878
Total science and engineering...	67	85	91	90	124	112	148	150
Physical sciences ¹	19	16	25	19	31	18	31	28
Mathematical sciences...	6	3	5	4	4	3	8	4
Computer science...	1	2	2	3	4	1	6	1
Biological sciences...	3	2	4	5	3	6	5	7
Agricultural sciences...	9	6	9	5	17	5	9	8
Social sciences...	0	3	5	2	3	3	3	8
Psychology...	23	37	30	39	33	39	59	59
Engineering...	21	24	30	25	47	43	55	58
Non-S&E ²	4	8	6	7	13	12	3	5
U.S. citizens and permanent residents, unknown race/ethnicity								
Total, all fields...	7,982	10,199	8,226	8,530	8,228	9,371	9,913	9,874
Total science and engineering...	1,062	1,102	985	1,071	1,175	1,103	1,343	1,412
Physical sciences ¹	69	53	49	43	41	39	68	56
Mathematical sciences...	65	65	48	62	49	65	61	86
Computer science...	221	217	141	89	78	95	99	105
Biological sciences...	78	108	91	96	90	108	109	120
Agricultural sciences...	13	30	18	38	41	49	87	61
Social sciences...	226	220	242	197	289	296	379	364
Psychology...	270	261	297	390	445	305	369	454
Engineering...	120	148	99	156	142	146	171	166
Non-S&E ²	6,920	9,097	7,241	7,459	7,053	8,268	8,570	8,462
Nonresident aliens ⁴								
Total, all fields...	9,501	10,903	12,461	13,415	15,288	16,365	17,597	18,200
Total science and engineering...	3,100	3,636	3,968	4,302	4,785	5,118	5,302	5,619
Physical sciences ¹	284	336	434	427	484	534	533	548
Mathematical sciences...	344	386	376	400	387	357	372	371
Computer science...	594	630	675	789	968	964	975	984
Biological sciences...	279	350	379	410	443	471	428	522
Agricultural sciences...	156	189	179	203	208	264	235	260
Social sciences...	744	800	865	962	978	1,086	1,089	1,227
Psychology...	160	249	213	207	221	231	336	315
Engineering...	539	696	847	904	1,096	1,211	1,334	1,392
Non-S&E ²	6,401	7,267	8,493	9,113	10,503	11,247	12,295	12,581

¹ In this table, "Physical science" includes earth, atmospheric, and ocean sciences, as well as physics, astronomy, and chemistry.² Non-S&E refers to non-science and non-engineering.³ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).⁴ Nonresident aliens include foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTE: Data on race/ethnicity of degree recipients were collected on broad fields of study only until 1994; therefore, these trend data could not be adjusted to the exact field taxonomies used by NSF.

SOURCE: Tabulations by National Science Foundation/Division of Science Resources Studies; data from U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Completions Survey.

Appendix table 4-8. Master's degrees awarded to men, by field and by race/ethnicity: 1989–96

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Field	1989	1990	1991	1992	1993	1994	1995	1996
Total, all recipients								
Total, all fields...	149,399	154,025	156,895	162,299	169,753	176,762	179,198	180,360
Total science and engineering...	47,724	48,424	47,748	49,768	53,102	55,461	55,803	54,928
Physical sciences ¹	4,180	3,981	3,825	3,895	3,803	4,030	4,000	3,968
Mathematical sciences.....	2,060	2,208	2,146	2,457	2,468	2,541	2,549	2,468
Computer science.....	6,773	6,968	6,563	6,884	7,411	7,727	7,630	7,500
Biological sciences.....	2,491	2,393	2,315	2,316	2,365	2,475	2,616	2,925
Agricultural sciences.....	1,746	1,708	1,681	1,928	2,029	2,040	2,131	2,324
Social sciences.....	7,006	7,424	7,574	7,939	8,419	8,945	8,981	8,910
Psychology.....	2,814	3,025	2,994	3,004	3,042	3,417	3,910	3,828
Engineering.....	20,654	20,717	20,650	21,345	23,565	24,286	23,986	23,005
Non-S&E ²	101,675	105,601	109,147	112,531	116,651	121,301	123,395	125,432
U.S. citizens and permanent residents, total ³								
Total, all fields...	126,777	130,326	131,745	136,062	140,932	146,621	148,039	150,310
Total science and engineering...	35,681	35,722	34,667	36,063	37,737	39,700	39,784	39,968
Physical sciences ¹	3,226	2,953	2,755	2,784	2,685	2,794	2,778	2,781
Mathematical sciences.....	1,428	1,559	1,463	1,745	1,717	1,803	1,765	1,758
Computer science.....	4,925	5,035	4,419	4,504	4,600	4,779	4,725	4,613
Biological sciences.....	2,134	2,014	1,945	1,931	1,959	2,013	2,164	2,470
Agricultural sciences.....	1,272	1,258	1,257	1,429	1,543	1,596	1,702	1,923
Social sciences.....	5,535	5,840	5,961	6,411	6,760	7,288	7,264	7,317
Psychology.....	2,715	2,889	2,890	2,909	2,931	3,287	3,762	3,704
Engineering.....	14,446	14,174	13,977	14,350	15,542	16,140	15,624	15,402
Non-S&E ²	91,096	94,604	97,078	99,999	103,195	106,921	108,255	110,342
White, non-Hispanics								
Total, all fields...	104,042	106,075	107,917	110,797	113,717	116,758	116,655	117,559
Total science and engineering...	28,115	28,250	27,634	28,113	29,493	30,846	30,464	30,591
Physical sciences ¹	2,750	2,518	2,299	2,234	2,229	2,252	2,256	2,288
Mathematical sciences.....	1,173	1,275	1,169	1,389	1,332	1,420	1,354	1,326
Computer science.....	3,430	3,474	3,260	3,236	3,326	3,309	3,231	3,170
Biological sciences.....	1,830	1,711	1,629	1,566	1,593	1,643	1,740	1,958
Agricultural sciences.....	1,174	1,138	1,134	1,250	1,357	1,340	1,450	1,687
Social sciences.....	4,592	4,781	4,981	5,276	5,453	5,880	5,750	5,758
Psychology.....	2,292	2,431	2,420	2,387	2,426	2,770	3,102	3,021
Engineering.....	10,874	10,922	10,742	10,775	11,777	12,232	11,581	11,383
Non-S&E ²	75,927	77,825	80,283	82,684	84,224	85,912	86,191	86,968

See explanatory information and SOURCE at end of table.

Appendix table 4-8. Master's degrees awarded to men, by field and by race/ethnicity: 1989-96

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Field	1989	1990	1991	1992	1993	1994	1995	1996
Asians/Pacific Islanders								
Total, all fields...	5,917	5,670	6,220	6,823	7,125	7,791	8,385	8,877
Total science and engineering...	2,939	2,799	2,959	3,276	3,237	3,561	3,733	3,726
Physical sciences ¹	179	140	165	206	150	182	187	168
Mathematical sciences...	117	106	108	103	121	126	134	132
Computer science...	565	609	627	705	710	785	785	775
Biological sciences...	105	97	104	125	136	151	209	237
Agricultural sciences...	24	24	27	30	32	35	44	49
Social sciences...	206	224	196	229	219	276	272	287
Psychology...	44	42	47	62	50	74	79	78
Engineering...	1,699	1,557	1,685	1,816	1,819	1,932	2,023	2,000
Non-S&E ²	2,978	2,871	3,261	3,547	3,888	4,230	4,652	5,151
Black, non-Hispanics								
Total, all fields...	4,964	5,169	5,619	5,794	6,472	7,007	7,636	7,998
Total science and engineering...	878	950	1,028	1,166	1,253	1,376	1,534	1,565
Physical sciences ¹	56	61	43	66	58	74	86	59
Mathematical sciences...	32	37	53	44	48	62	64	78
Computer science...	119	140	150	175	193	205	199	205
Biological sciences...	59	51	58	61	47	48	50	76
Agricultural sciences...	24	18	34	36	40	46	35	49
Social sciences...	206	223	262	315	345	358	418	391
Psychology...	120	133	129	137	115	161	218	243
Engineering...	262	287	299	332	407	422	464	464
Non-S&E ²	4,086	4,219	4,591	4,628	5,219	5,631	6,102	6,433
Hispanics								
Total, all fields...	3,597	3,713	4,124	4,381	4,875	5,483	5,725	6,072
Total science and engineering...	970	959	992	1,066	1,255	1,427	1,458	1,478
Physical sciences ¹	65	63	73	64	76	80	88	80
Mathematical sciences...	21	33	52	47	50	44	53	57
Computer science...	100	93	84	98	104	120	151	125
Biological sciences...	62	61	54	69	76	65	75	85
Agricultural sciences...	34	25	31	31	35	105	56	55
Social sciences...	176	178	196	218	282	290	283	320
Psychology...	118	133	124	131	152	141	174	176
Engineering...	394	373	378	408	480	582	578	580
Non-S&E ²	2,627	2,754	3,132	3,315	3,620	4,056	4,267	4,594

See explanatory information and SOURCE at end of table.

Appendix table 4-8. Master's degrees awarded to men, by field and by race/ethnicity: 1989–96

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Field	1989	1990	1991	1992	1993	1994	1995	1996
American Indians/Alaskan Natives								
Total, all fields...	478	439	464	501	556	654	623	665
Total science and engineering...	142	96	109	108	129	161	151	154
Physical sciences ¹	12	6	8	14	8	13	11	6
Mathematical sciences.....	5	4	7	1	4	5	5	5
Computer science.....	36	5	10	10	11	12	11	17
Biological sciences.....	8	8	4	7	9	12	11	9
Agricultural sciences.....	6	5	3	5	5	8	10	6
Social sciences.....	34	28	24	23	45	44	33	38
Psychology.....	12	13	19	13	10	19	30	22
Engineering.....	29	27	34	35	37	48	40	51
Non-S&E ²	336	343	355	393	427	493	472	511
U.S. citizens and permanent residents, unknown race/ethnicity								
Total, all fields...	7,779	9,260	7,401	7,766	8,187	8,928	9,015	9,139
Total science and engineering...	2,637	2,668	1,945	2,334	2,370	2,329	2,444	2,454
Physical sciences ¹	164	165	167	200	164	193	150	180
Mathematical sciences.....	80	104	74	161	162	146	155	160
Computer science.....	675	714	288	280	256	348	348	321
Biological sciences.....	70	86	96	103	98	94	79	105
Agricultural sciences.....	10	48	28	77	74	62	107	77
Social sciences.....	321	406	302	350	416	440	508	523
Psychology.....	129	137	151	179	178	122	159	164
Engineering.....	1,188	1,008	839	984	1,022	924	938	924
Non-S&E ²	5,142	6,592	5,456	5,432	5,817	6,599	6,571	6,685
Nonresident aliens ⁴								
Total, all fields...	22,622	23,699	25,150	26,237	28,821	30,141	31,159	30,050
Total science and engineering...	12,043	12,702	13,081	13,705	15,365	15,761	16,019	14,960
Physical sciences ¹	954	1,028	1,070	1,111	1,118	1,236	1,222	1,187
Mathematical sciences.....	632	649	683	712	751	738	784	710
Computer science.....	1,848	1,933	2,144	2,380	2,811	2,948	2,905	2,887
Biological sciences.....	357	379	370	385	406	462	452	455
Agricultural sciences.....	474	450	424	499	486	444	429	401
Social sciences.....	1,471	1,584	1,613	1,528	1,659	1,657	1,717	1,593
Psychology.....	99	136	104	95	111	130	148	124
Engineering.....	6,208	6,543	6,673	6,995	8,023	8,146	8,362	7,603
Non-S&E ²	10,579	10,997	12,069	12,532	13,456	14,380	15,140	15,090

¹ In this table, "Physical science" includes earth, atmospheric, and ocean sciences, as well as physics, astronomy, and chemistry.

² Non-S&E refers to non-science and non-engineering.

³ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

⁴ Nonresident aliens include foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTE: Data on race/ethnicity of degree recipients were collected on broad fields of study only until 1994; therefore, these trend data could not be adjusted to the exact field taxonomies used by NSF.

SOURCE: Tabulations by National Science Foundation/Division of Science Resources Studies; data from U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Completions Survey.

Appendix table 4-9. Doctoral degrees awarded, by major field group: 1966-97

Year	Total, all fields	Science & engineering fields									
		Total, science and engineering	Engi- neering	Physical sciences	Earth, atmo- spheric, & ocean sciences	Mathe- matics	Computer science	Biological/ agricultural sciences	Psych- ology	Social sciences	Non- science and engineering
1966	17,949	11,570	2,301	2,655	404	769	19	2,711	1,139	1,591	6,379
1967	20,403	13,109	2,607	3,085	415	830	38	2,966	1,295	1,911	7,294
1968	22,937	14,645	2,864	3,239	434	971	36	3,511	1,464	2,162	8,292
1969	25,743	16,288	3,276	3,428	496	1,070	64	3,815	1,766	2,437	9,455
1970	29,498	18,052	3,446	3,893	498	1,225	107	4,165	1,890	2,935	11,446
1971	31,867	19,381	3,514	3,949	536	1,238	128	4,557	2,145	3,442	12,486
1972	33,041	19,342	3,509	3,653	598	1,281	167	4,454	2,279	3,568	13,699
1973	33,755	19,373	3,374	3,444	624	1,232	196	4,503	2,458	3,737	14,382
1974	33,047	18,714	3,161	3,136	615	1,211	198	4,304	2,598	3,689	14,333
1975	32,952	18,799	3,011	3,076	625	1,147	213	4,402	2,751	3,787	14,153
1976	32,946	18,472	2,838	2,861	641	1,003	244	4,361	2,883	3,885	14,474
1977	31,716	18,008	2,648	2,721	689	933	216	4,266	2,990	3,730	13,708
1978	30,875	17,653	2,425	2,611	621	838	196	4,369	3,055	3,613	13,222
1979	31,239	17,872	2,494	2,674	642	769	210	4,501	3,091	3,491	13,367
1980	31,020	17,775	2,479	2,521	628	744	218	4,715	3,098	3,372	13,245
1981	31,356	18,257	2,528	2,627	583	728	232	4,785	3,358	3,416	13,099
1982	31,111	18,275	2,646	2,694	657	720	220	4,844	3,159	3,335	12,836
1983	31,281	18,635	2,781	2,814	624	701	286	4,756	3,347	3,326	12,646
1984	31,337	18,748	2,913	2,851	608	698	295	4,877	3,257	3,249	12,589
1985	31,297	18,935	3,166	2,934	599	688	310	4,903	3,118	3,217	12,362
1986	31,902	19,437	3,376	3,120	559	729	399	4,804	3,126	3,324	12,465
1987	32,370	19,894	3,712	3,238	602	740	450	4,815	3,173	3,164	12,476
1988	33,500	20,932	4,187	3,350	695	749	515	5,126	3,074	3,236	12,568
1989	34,327	21,732	4,543	3,261	723	859	612	5,202	3,208	3,324	12,595
1990	36,067	22,868	4,894	3,524	738	892	705	5,502	3,281	3,332	13,199
1991	37,534	24,023	5,214	3,626	815	1,039	800	5,723	3,250	3,556	13,511
1992	38,890	24,675	5,438	3,781	794	1,058	869	5,862	3,263	3,610	14,215
1993	39,801	25,443	5,698	3,699	771	1,146	880	6,060	3,420	3,769	14,358
1994	41,034	26,205	5,822	3,977	824	1,118	903	6,281	3,379	3,901	14,829
1995	41,743	26,535	6,008	3,841	780	1,190	997	6,412	3,429	3,878	15,208
1996	42,415	27,230	6,305	3,838	794	1,122	921	6,760	3,491	3,999	15,185
1997	42,705	26,847	6,052	3,711	862	1,112	889	6,683	3,489	4,049	15,858

SOURCE: National Science Foundation/Division of Science Resources Studies, Survey of Earned Doctorates.

Women, Minorities, and Persons With Disabilities in Science and Engineering: 2000

Appendix table 4-10. Doctoral degrees awarded to women, by major field group: 1966–97

Year	Total, all fields	Science & engineering fields									Non- science and engi- neering	Index of dis- similarity ¹
		Total, science and engi- neering	Engi- neering	Physical sciences	Earth, atmo- spheric, & ocean sciences	Mathe- matics	Computer science	Biolog- ical/agri- cultural sciences	Psych- ology	Social sciences		
1966	2,086	924	8	120	12	47	0	325	245	167	1,162	26.1
1967	2,442	1,096	9	155	6	48	1	401	265	212	1,346	25.8
1968	2,932	1,317	12	175	11	47	0	483	333	256	1,615	25.2
1969	3,388	1,507	10	186	20	56	2	538	416	281	1,881	25.4
1970	3,971	1,648	16	227	15	77	2	538	444	331	2,323	24.6
1971	4,596	1,996	16	231	13	96	3	660	530	450	2,600	22.4
1972	5,287	2,151	22	249	22	96	12	673	609	480	3,136	22.6
1973	6,085	2,520	46	235	27	119	15	789	717	586	3,565	20.7
1974	6,453	2,671	34	234	34	115	9	780	801	673	3,782	20.0
1975	7,201	2,929	52	264	30	109	14	849	873	752	4,272	20.4
1976	7,684	3,097	55	244	62	113	23	853	946	824	4,587	19.5
1977	7,858	3,233	74	244	59	122	19	843	1,088	798	4,625	20.3
1978	8,322	3,454	53	247	61	120	15	958	1,127	877	4,868	19.4
1979	8,937	3,744	62	292	58	119	27	1,031	1,260	895	5,193	19.5
1980	9,408	3,961	90	322	64	95	21	1,150	1,311	908	5,447	19.1
1981	9,892	4,201	99	309	56	112	26	1,221	1,473	905	5,691	19.9
1982	10,093	4,350	124	357	103	96	20	1,292	1,438	920	5,743	19.7
1983	10,533	4,715	124	373	95	113	36	1,366	1,597	1,011	5,818	19.3
1984	10,699	4,792	151	399	106	115	37	1,348	1,631	1,005	5,907	19.9
1985	10,744	4,891	198	467	108	106	33	1,409	1,541	1,029	5,853	19.4
1986	11,307	5,167	225	510	95	121	48	1,452	1,599	1,117	6,140	19.6
1987	11,432	5,312	242	528	112	125	65	1,531	1,698	1,011	6,120	20.0
1988	11,819	5,662	286	567	135	121	56	1,691	1,681	1,125	6,157	19.6
1989	12,513	6,109	375	619	148	155	108	1,769	1,800	1,135	6,404	19.5
1990	13,106	6,370	415	661	141	158	110	1,861	1,913	1,111	6,736	20.3
1991	13,873	6,932	467	679	179	199	117	1,982	1,996	1,313	6,941	19.8
1992	14,436	7,080	506	770	188	205	120	2,064	1,928	1,299	7,356	19.4
1993	15,122	7,652	522	780	160	264	138	2,278	2,088	1,422	7,470	18.5
1994	15,819	7,920	635	828	183	236	137	2,357	2,101	1,443	7,899	18.8
1995	16,414	8,288	696	878	170	265	186	2,446	2,180	1,467	8,126	18.1
1996	16,945	8,646	776	842	172	231	139	2,697	2,328	1,461	8,299	18.7
1997	17,322	8,796	747	833	204	260	144	2,718	2,324	1,566	8,526	17.4

¹ The dissimilarity index is a measure of the percentage of women doctorate recipients who would need to switch fields of study to match the percentage distribution of men receiving doctorates. The index is calculated as the sum of the absolute difference between the percentage of women doctorate recipients earning degrees in each field and the percentage of men doctorate recipients earning degrees in each field divided by 2.

SOURCE: National Science Foundation/Division of Science Resources Studies, Survey of Earned Doctorates.

Appendix table 4-11. Women as a percentage of all doctorate recipients, by major field group: 1966–97

Year	Total, all fields	Science & engineering fields									
		Total, science and engineering	Engi- neering	Physical sciences	Earth, atmo- spheric, & ocean sciences	Mathe- matics	Computer science	Biological/ agricultural sciences	Psych- ology	Social sciences	Non- science and engineering
1966	11.6	8.0	0.3	4.5	3.0	6.1	0.0	12.0	21.5	10.5	18.2
1967	12.0	8.4	0.3	5.0	1.4	5.8	2.6	13.5	20.5	11.1	18.5
1968	12.8	9.0	0.4	5.4	2.5	4.8	0.0	13.8	22.7	11.8	19.5
1969	13.2	9.3	0.3	5.4	4.0	5.2	3.1	14.1	23.6	11.5	19.9
1970	13.5	9.1	0.5	5.8	3.0	6.3	1.9	12.9	23.5	11.3	20.3
1971	14.4	10.3	0.5	5.8	2.4	7.8	2.3	14.5	24.7	13.1	20.8
1972	16.0	11.1	0.6	6.8	3.7	7.5	7.2	15.1	26.7	13.5	22.9
1973	18.0	13.0	1.4	6.8	4.3	9.7	7.7	17.5	29.2	15.7	24.8
1974	19.5	14.3	1.1	7.5	5.5	9.5	4.5	18.1	30.8	18.2	26.4
1975	21.9	15.6	1.7	8.6	4.8	9.5	6.6	19.3	31.7	19.9	30.2
1976	23.3	16.8	1.9	8.5	9.7	11.3	9.4	19.6	32.8	21.2	31.7
1977	24.8	18.0	2.8	9.0	8.6	13.1	8.8	19.8	36.4	21.4	33.7
1978	27.0	19.6	2.2	9.5	9.8	14.3	7.7	21.9	36.9	24.3	36.8
1979	28.6	20.9	2.5	10.9	9.0	15.5	12.9	22.9	40.8	25.6	38.8
1980	30.3	22.3	3.6	12.8	10.2	12.8	9.6	24.4	42.3	26.9	41.1
1981	31.5	23.0	3.9	11.8	9.6	15.4	11.2	25.5	43.9	26.5	43.4
1982	32.4	23.8	4.7	13.3	15.7	13.3	9.1	26.7	45.5	27.6	44.7
1983	33.7	25.3	4.5	13.3	15.2	16.1	12.6	28.7	47.7	30.4	46.0
1984	34.1	25.6	5.2	14.0	17.4	16.5	12.5	27.6	50.1	30.9	46.9
1985	34.3	25.8	6.3	15.9	18.0	15.4	10.6	28.7	49.4	32.0	47.3
1986	35.4	26.6	6.7	16.3	17.0	16.6	12.0	30.2	51.2	33.6	49.3
1987	35.3	26.7	6.5	16.3	18.6	16.9	14.4	31.8	53.5	32.0	49.1
1988	35.3	27.0	6.8	16.9	19.4	16.2	10.9	33.0	54.7	34.8	49.0
1989	36.5	28.1	8.3	19.0	20.5	18.0	17.6	34.0	56.1	34.1	50.8
1990	36.3	27.9	8.5	18.8	19.1	17.7	15.6	33.8	58.3	33.3	51.0
1991	37.0	28.9	9.0	18.7	22.0	19.2	14.6	34.6	61.4	36.9	51.4
1992	37.1	28.7	9.3	20.4	23.7	19.4	13.8	35.2	59.1	36.0	51.7
1993	38.0	30.1	9.2	21.1	20.8	23.0	15.7	37.6	61.1	37.7	52.0
1994	38.6	30.2	10.9	20.8	22.2	21.1	15.2	37.5	62.2	37.0	53.3
1995	39.3	31.2	11.6	22.9	21.8	22.3	18.7	38.1	63.6	37.8	53.4
1996	40.0	31.8	12.3	21.9	21.7	20.6	15.1	39.9	66.7	36.5	54.7
1997	40.6	32.8	12.3	22.4	23.7	23.4	16.2	40.7	66.6	38.7	53.8

SOURCE: National Science Foundation/Division of Science Resources Studies, Survey of Earned Doctorates.

Appendix table 4-12. Doctoral degrees earned by U.S. citizens and permanent residents, by race/ethnicity and field: 1975-97

Page 1 of 4

Year	Total, all fields	Science and engi- neering, total	Engi- neering	Physical sciences	Earth, atmo- spheric, & ocean sciences	Mathe- matics	Computer science	Agri- cultural sciences	Biological sciences	Psych- ology	Social sciences	Non- science and engi- neering	Index of dis- similarity ¹
U.S. citizens and permanent residents, total													
1975....	28,796	15,641	2,137	2,553	527	923	0	633	3,100	2,607	3,161	13,155	NA
1976....	28,763	15,360	1,949	2,392	538	803	0	536	3,160	2,768	3,214	13,403	NA
1977....	27,487	14,881	1,799	2,262	580	744	25	514	3,071	2,821	3,065	12,606	NA
1978....	26,635	14,551	1,586	2,161	540	666	90	573	3,134	2,858	2,943	12,084	NA
1979....	26,784	14,711	1,617	2,205	564	603	175	573	3,262	2,895	2,817	12,073	NA
1980....	26,512	14,577	1,554	2,035	538	582	169	605	3,430	2,909	2,755	11,935	NA
1981....	26,341	14,654	1,471	2,103	488	525	188	629	3,420	3,158	2,672	11,687	NA
1982....	25,622	14,339	1,465	2,110	557	499	155	670	3,434	2,923	2,526	11,283	NA
1983....	25,634	14,518	1,482	2,194	503	457	207	685	3,324	3,108	2,558	11,116	NA
1984....	25,252	14,294	1,513	2,194	495	443	195	660	3,399	2,987	2,408	10,958	NA
1985....	24,694	14,065	1,594	2,187	465	418	213	726	3,256	2,864	2,342	10,629	NA
1986....	24,519	14,016	1,726	2,166	427	402	249	626	3,241	2,832	2,347	10,503	NA
1987....	24,562	14,055	1,913	2,242	435	396	275	632	3,141	2,806	2,215	10,507	NA
1988....	24,912	14,498	2,146	2,258	520	386	326	610	3,322	2,729	2,201	10,414	NA
1989....	25,027	14,592	2,229	2,131	547	428	396	651	3,300	2,737	2,173	10,435	NA
1990....	26,603	15,364	2,346	2,341	535	422	403	687	3,380	2,992	2,258	11,239	NA
1991....	27,430	15,914	2,474	2,300	618	518	451	620	3,525	3,018	2,390	11,516	NA
1992....	27,990	15,942	2,520	2,357	541	507	489	573	3,568	2,986	2,401	12,048	NA
1993....	28,708	16,573	2,697	2,330	504	590	509	506	3,752	3,161	2,524	12,135	NA
1994....	30,894	18,187	3,053	2,789	613	657	543	616	4,088	3,136	2,692	12,707	NA
1995....	32,059	18,996	3,342	2,841	594	771	616	598	4,329	3,184	2,721	13,063	NA
1996....	31,506	18,628	3,383	2,568	558	646	513	576	4,365	3,226	2,793	12,878	NA
1997....	30,601	18,005	3,281	2,473	587	616	506	546	4,203	2,976	2,817	12,596	NA
White, non-Hispanics													
1975....	24,962	13,526	1,651	2,180	475	796	0	561	2,750	2,362	2,751	11,436	NA
1976....	24,943	13,352	1,524	2,032	489	698	0	487	2,789	2,541	2,792	11,591	NA
1977....	23,654	12,875	1,429	1,883	517	649	22	458	2,740	2,541	2,636	10,779	NA
1978....	22,342	12,204	1,169	1,750	466	563	77	486	2,702	2,524	2,467	10,138	NA
1979....	22,396	12,314	1,157	1,787	500	505	153	503	2,830	2,550	2,329	10,082	NA
1980....	22,462	12,336	1,143	1,661	485	496	143	539	2,972	2,562	2,335	10,126	NA
1981....	22,470	12,573	1,093	1,757	448	448	162	551	3,015	2,849	2,250	9,897	NA
1982....	22,143	12,493	1,100	1,859	510	437	136	616	3,062	2,638	2,135	9,650	NA
1983....	22,251	12,671	1,128	1,928	444	395	174	614	2,995	2,785	2,208	9,580	NA
1984....	21,879	12,422	1,157	1,891	458	380	163	602	3,045	2,685	2,041	9,457	NA
1985....	21,306	12,169	1,188	1,906	425	350	177	659	2,913	2,591	1,960	9,137	NA
1986....	21,236	12,151	1,354	1,875	397	343	194	557	2,888	2,548	1,995	9,085	NA
1987....	21,122	12,052	1,458	1,956	394	319	229	554	2,759	2,516	1,867	9,070	NA
1988....	21,460	12,455	1,655	1,948	480	332	265	518	2,965	2,445	1,847	9,005	NA
1989....	21,570	12,501	1,726	1,828	498	369	319	570	2,904	2,453	1,834	9,069	NA
1990....	22,878	13,170	1,840	2,008	494	372	339	601	2,975	2,648	1,893	9,708	NA
1991....	23,185	13,323	1,837	1,968	557	419	355	545	3,041	2,652	1,949	9,862	NA
1992....	23,625	13,326	1,880	1,973	485	425	378	493	3,068	2,636	1,988	10,299	NA
1993....	24,052	13,737	2,025	1,911	455	476	410	438	3,146	2,807	2,069	10,315	NA
1994....	24,594	13,889	2,020	2,025	504	479	401	487	3,107	2,730	2,136	10,705	NA
1995....	24,719	13,902	2,090	1,922	464	535	453	473	3,119	2,727	2,119	10,817	NA
1996....	24,685	13,999	2,260	1,888	449	478	356	444	3,171	2,741	2,212	10,686	NA
1997....	23,789	13,623	2,262	1,866	470	470	357	410	3,120	2,464	2,204	10,166	NA

See explanatory information and SOURCE at end of table.

Appendix table 4-12. Doctoral degrees earned by U.S. citizens and permanent residents, by race/ethnicity and field: 1975–97

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Year	Total, all fields	Science and engi- neering, total	Engi- neering	Physical sciences	Earth, atmo- spheric, & ocean sciences	Mathe- matics	Computer science	Agri- cultural sciences	Biologi- cal sciences	Psych- ology	Social sciences	Non- science and engi- neering	Index of dis- similarity ¹
Asians/Pacific Islanders													
1975	1,025	814	275	171	18	62	0	46	141	21	80	211	36.0
1976	975	802	279	181	21	49	0	20	147	22	83	173	39.3
1977	910	745	249	160	21	42	0	21	140	33	79	165	37.1
1978	1,032	835	272	179	25	43	4	37	151	28	96	197	36.6
1979	1,102	884	306	168	21	46	9	23	165	36	110	218	34.3
1980	1,102	868	278	164	22	42	9	28	170	50	105	234	31.7
1981	1,073	827	285	149	14	40	16	25	156	41	101	246	31.4
1982	1,004	768	246	131	27	32	12	23	159	31	107	236	29.4
1983	1,042	780	247	136	26	34	20	33	164	44	76	262	28.8
1984	1,023	778	252	145	18	30	20	20	158	43	92	245	28.8
1985	1,070	809	281	152	19	33	17	24	151	44	88	261	28.6
1986	1,061	816	262	147	14	28	37	22	168	42	96	245	29.2
1987	1,168	925	327	143	18	41	26	38	170	48	114	243	30.3
1988	1,235	916	332	138	14	33	44	30	171	47	107	319	24.8
1989	1,268	986	361	156	23	24	52	23	201	55	91	282	29.5
1990	1,306	1,009	359	164	15	27	48	32	200	53	111	297	28.4
1991	1,531	1,180	405	172	17	57	66	24	261	59	119	351	29.9
1992	1,764	1,345	451	227	27	52	86	37	269	59	137	419	28.8
1993	2,017	1,610	527	265	22	79	77	29	370	73	168	407	32.2
1994	3,546	2,989	867	600	89	142	117	72	720	109	273	557	36.8
1995	4,309	3,671	1,033	751	104	208	137	78	925	122	313	638	38.6
1996	3,697	3,091	895	504	77	140	111	81	888	124	271	606	36.3
1997	3,140	2,527	704	404	71	99	106	63	717	128	235	613	31.3
Black, non-Hispanics													
1975	1,056	295	16	34	1	11	0	5	49	78	101	761	26.3
1976	1,146	299	21	25	0	5	0	8	53	85	102	847	27.4
1977	1,191	342	15	32	2	9	0	15	36	95	138	849	26.2
1978	1,104	351	13	37	4	13	0	11	55	99	119	753	22.8
1979	1,112	347	20	37	3	11	1	9	35	115	116	765	23.8
1980	1,104	331	18	16	1	12	0	7	51	119	107	773	24.9
1981	1,110	346	19	24	4	9	2	11	50	113	114	764	25.0
1982	1,144	355	20	26	3	6	1	7	49	115	128	789	26.9
1983	1,005	338	29	25	1	3	3	12	46	112	107	667	24.0
1984	1,056	376	15	34	3	4	3	18	50	121	128	680	24.0
1985	1,043	374	34	27	4	7	3	16	53	105	125	669	24.0
1986	956	339	24	27	0	6	1	16	48	111	106	617	23.5
1987	910	319	25	20	2	11	2	13	60	93	93	591	23.4
1988	970	361	31	34	3	4	2	20	48	105	114	609	24.0
1989	963	367	33	31	4	8	1	14	57	97	122	596	24.0
1990	1,050	374	40	30	3	4	1	15	51	115	115	676	24.6
1991	1,166	464	55	32	3	11	8	17	64	130	144	702	21.6
1992	1,116	408	49	25	6	4	5	14	62	106	137	708	23.7
1993	1,280	469	50	41	4	8	6	16	75	119	150	811	23.6
1994	1,279	500	54	46	6	11	10	22	79	124	148	779	20.3
1995	1,477	560	71	43	3	5	11	17	108	151	151	917	20.0
1996	1,457	576	74	60	4	8	12	25	98	154	141	881	17.9
1997	1,476	607	97	50	9	7	4	24	108	152	156	869	17.4

See explanatory information and SOURCE at end of table.

Appendix table 4-12. Doctoral degrees earned by U.S. citizens and permanent residents, by race/ethnicity and field: 1975-97

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Year	Total, all fields	Science and engi- neering, total	Engi- neering	Physical sciences	Earth, atmo- spheric, & ocean sciences	Mathe- matics	Computer science	Agri- cultural sciences	Biological sciences	Psych- ology	Social sciences	Non- science and engi- neering	Index of dis- similarity ¹
Hispanics													
1975....	347	151	18	19	5	8	0	5	33	32	31	196	10.7
1976....	374	139	16	18	0	9	0	4	26	28	38	235	16.4
1977....	489	203	24	34	12	12	0	4	26	40	51	286	13.2
1978....	553	233	33	23	5	7	0	10	32	53	70	320	14.8
1979....	547	234	24	33	6	10	2	6	39	50	64	313	13.5
1980....	490	217	27	27	4	5	1	5	31	56	61	273	13.1
1981....	529	240	16	30	6	5	0	16	41	66	60	289	12.5
1982....	617	274	36	25	7	6	1	7	47	74	71	343	14.8
1983....	608	284	29	26	11	7	0	6	43	94	68	324	14.4
1984....	605	298	34	47	2	11	3	8	44	84	65	307	11.0
1985....	634	296	22	30	6	12	6	12	59	69	80	338	14.2
1986....	679	345	35	41	4	12	7	17	66	90	73	334	9.3
1987....	708	357	34	56	5	11	4	15	62	95	75	351	9.9
1988....	693	397	63	63	7	4	2	21	76	93	68	296	6.0
1989....	694	382	47	59	9	11	4	18	71	93	70	312	6.6
1990....	837	468	54	72	13	10	5	23	89	109	93	369	6.1
1991....	867	492	60	65	16	9	12	15	95	122	98	375	6.2
1992....	909	513	71	72	16	12	8	18	102	133	81	396	4.0
1993....	973	542	66	79	13	16	7	20	114	131	96	431	4.9
1994....	1,030	548	66	90	8	13	7	25	131	133	75	482	6.1
1995....	1,061	571	77	73	13	15	6	21	127	145	94	490	5.4
1996....	1,105	623	98	66	19	10	16	13	131	173	97	482	4.9
1997....	1,181	645	95	64	16	18	16	26	145	169	96	536	7.1
American Indians/Alaskan Natives													
1975....	36	13	1	0	0	3	0	0	1	5	3	23	27.6
1976....	40	11	0	0	0	0	0	1	2	4	4	29	26.6
1977....	66	31	1	6	0	1	0	1	7	9	6	35	11.5
1978....	60	22	2	4	0	1	0	2	5	3	5	38	19.1
1979....	81	29	3	1	2	0	1	0	3	10	9	52	21.6
1980....	75	27	3	3	2	0	0	1	5	6	7	48	19.4
1981....	85	28	4	1	0	1	0	1	6	9	6	57	23.0
1982....	77	39	3	3	0	1	1	3	7	16	5	38	16.4
1983....	82	30	1	6	2	0	1	1	4	9	6	52	21.2
1984....	74	32	3	4	0	3	0	1	10	6	5	42	15.8
1985....	96	41	1	3	1	0	0	4	13	10	9	55	15.7
1986....	99	52	6	5	2	1	0	0	17	9	12	47	11.1
1987....	115	53	7	7	0	0	3	2	11	16	7	62	14.5
1988....	94	44	4	6	2	2	1	6	6	7	10	50	17.8
1989....	94	53	7	10	6	0	2	2	7	11	8	41	8.8
1990....	97	43	4	3	1	1	0	4	4	19	7	54	22.7
1991....	132	56	6	10	3	0	1	4	10	13	9	76	15.7
1992....	149	69	11	12	1	2	2	0	13	15	13	80	10.4
1993....	120	43	2	5	4	1	1	1	7	15	7	77	23.6
1994....	143	64	6	6	1	2	1	1	16	12	19	79	16.3
1995....	149	69	10	9	0	2	0	2	15	14	17	80	12.8
1996....	187	96	14	6	2	1	4	5	21	18	25	91	11.4
1997....	151	71	12	9	2	1	1	4	9	18	16	80	13.7

See explanatory information and SOURCE at end of table.

Appendix table 4-12. Doctoral degrees earned by U.S. citizens and permanent residents, by race/ethnicity and field: 1975–97

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Year	Total, all fields	Science and engi- neering, total	Engi- neering	Physical sciences	Earth, atmo- spheric, & ocean sciences	Mathe- matics	Computer science	Agri- cultural sciences	Biological sciences	Psych- ology	Social sciences	Non- science and engi- neering	Index of dis- similarity ¹
Other/unknown race/ethnicity													
1975....	1,370	842	176	149	28	43	0	16	126	109	195	528	11.7
1976....	1,285	757	109	136	28	42	0	16	143	88	195	528	9.5
1977....	1,177	685	81	147	28	31	3	15	122	103	155	492	7.7
1978....	1,544	906	97	168	40	39	9	27	189	151	186	638	6.0
1979....	1,546	903	107	179	32	31	9	32	190	134	189	643	7.2
1980....	1,279	798	85	164	24	27	16	25	201	116	140	481	10.6
1981....	1,074	640	54	142	16	22	8	25	152	80	141	434	9.5
1982....	637	410	60	66	10	17	4	14	110	49	80	227	13.5
1983....	646	415	48	73	19	18	9	19	72	64	93	231	12.2
1984....	615	388	52	73	14	15	6	11	92	48	77	227	11.7
1985....	545	376	68	69	10	16	10	11	67	45	80	169	18.4
1986....	488	313	45	71	10	12	10	14	54	32	65	175	14.9
1987....	539	349	62	60	16	14	11	10	79	38	59	190	13.3
1988....	460	325	61	69	14	11	12	15	56	32	55	135	18.7
1989....	438	303	55	47	7	16	18	24	60	28	48	135	16.9
1990....	435	300	49	64	9	8	10	12	61	48	39	135	12.0
1991....	549	399	111	53	22	22	9	15	54	42	71	150	22.3
1992....	427	281	58	48	6	12	10	11	54	37	45	146	12.9
1993....	266	172	27	29	6	10	8	2	40	16	34	94	14.3
1994....	302	197	40	22	5	10	7	9	35	28	41	105	13.0
1995....	344	223	61	43	10	6	9	7	35	25	27	121	15.9
1996....	375	243	42	44	7	9	14	8	56	16	47	132	14.9
1997....	864	532	111	80	19	21	22	19	104	45	110	332	10.5

¹ The dissimilarity index is a measure of the percentage of doctorate recipients in a racial/ethnic group who would need to switch fields of study to match the percentage distribution by field of white students receiving doctoral degrees. The index is calculated as the sum of the absolute difference between the percentage of degree recipients in a particular racial/ethnic group earning doctoral degrees in each field and the percentage of white degree recipients earning doctoral degrees in each field divided by 2.

SOURCE: National Science Foundation/Division of Science Resources Studies, Survey of Earned Doctorates.

Women, Minorities, and Persons With Disabilities in Science and Engineering: 2000

Appendix table 4-13. Doctorates awarded, by citizenship status, racial/ethnic group, and field of doctorate: 1997

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Field of doctorate	U.S. citizens and permanent residents, total ¹	White, non-Hispanic	Asian/ Pacific Islander	Black, non-Hispanic	Hispanic				American Indian/ Alaskan Native
					Hispanic, total	Puerto Rican	Mexican American	Other Hispanic	
Total, all fields...	30,601	23,789	3,140	1,476	1,181	312	299	570	151
Science and engineering, total...	18,005	13,623	2,527	607	645	173	157	315	71
Engineering, total...	3,281	2,262	704	97	95	23	17	55	12
Chemical...	405	291	73	16	7	1	3	3	2
Civil...	323	215	74	10	11	5	1	5	2
Electrical...	927	575	253	31	26	4	5	17	4
Mechanical...	531	373	111	12	15	6	3	6	4
Other engineering...	1,095	808	193	28	36	7	5	24	0
Sciences, total...	14,724	11,361	1,823	510	550	150	140	260	59
Physical sciences, total...	2,473	1,866	404	50	64	20	15	29	9
Astronomy...	157	131	8	2	3	0	0	3	1
Chemistry...	1,426	1,071	235	33	39	13	9	17	6
Physics...	875	650	160	15	22	7	6	9	2
Other physical sciences...	15	14	1	0	0	0	0	0	0
Earth, atmospheric, & ocean sciences...	587	470	71	9	16	5	4	7	2
Mathematics...	616	470	99	7	18	4	3	11	1
Computer sciences...	506	357	106	4	16	6	2	8	1
Biological sciences...	4,203	3,120	717	108	145	37	42	66	9
Agricultural sciences...	546	410	63	24	26	4	2	20	4
Psychology...	2,976	2,464	128	152	169	58	47	64	17
Social sciences...	2,817	2,204	235	156	96	16	25	55	16
Non-S&E, total...	12,596	10,166	613	869	536	139	142	255	80
Health...	1,011	817	86	55	31	9	7	15	5
Humanities...	4,151	3,491	173	139	200	49	35	116	16
Education...	5,532	4,417	176	553	253	70	87	96	48
Professional/other ...	1,902	1,441	178	122	52	11	13	28	11

See explanatory information and SOURCES at end of table.

Appendix table 4-13. Doctorates awarded, by citizenship status, racial/ethnic group, and field of doctorate: 1997

Page 2 of 2

Field of doctorate	U.S. citizens and permanent residents, total ¹	White, non- Hispanic	Asian/ Pacific Islander	Black, non- Hispanic	Hispanic				American Indian/ Alaskan Native
					Hispanic, total	Puerto Rican	Mexican American	Other Hispanic	
Percentage distribution									
Total, all fields...	100.0	77.7	10.3	4.8	3.9	1.0	1.0	1.9	0.5
Science and engineering, total...	100.0	75.7	14.0	3.4	3.6	1.0	0.9	1.7	0.4
Engineering, total...	100.0	68.9	21.5	3.0	2.9	0.7	0.5	1.7	0.4
Chemical...	100.0	71.9	18.0	4.0	1.7	0.2	0.7	0.7	0.5
Civil...	100.0	66.6	22.9	3.1	3.4	1.5	0.3	1.5	0.6
Electrical...	100.0	62.0	27.3	3.3	2.8	0.4	0.5	1.8	0.4
Mechanical...	100.0	70.2	20.9	2.3	2.8	1.1	0.6	1.1	0.8
Other engineering...	100.0	73.8	17.6	2.6	3.3	0.6	0.5	2.2	0.0
Sciences, total...	100.0	77.2	12.4	3.5	3.7	1.0	1.0	1.8	0.4
Physical sciences, total...	100.0	75.5	16.3	2.0	2.6	0.8	0.6	1.2	0.4
Astronomy...	100.0	83.4	5.1	1.3	1.9	0.0	0.0	1.9	0.6
Chemistry...	100.0	75.1	16.5	2.3	2.7	0.9	0.6	1.2	0.4
Physics...	100.0	74.3	18.3	1.7	2.5	0.8	0.7	1.0	0.2
Other physical sciences...	100.0	93.3	6.7	0.0	0.0	0.0	0.0	0.0	0.0
Earth, atmospheric, & ocean sciences...	100.0	80.1	12.1	1.5	2.7	0.9	0.7	1.2	0.3
Mathematics...	100.0	76.3	16.1	1.1	2.9	0.6	0.5	1.8	0.2
Computer sciences...	100.0	70.6	20.9	0.8	3.2	1.2	0.4	1.6	0.2
Biological sciences...	100.0	74.2	17.1	2.6	3.4	0.9	1.0	1.6	0.2
Agricultural sciences...	100.0	75.1	11.5	4.4	4.8	0.7	0.4	3.7	0.7
Psychology...	100.0	82.8	4.3	5.1	5.7	1.9	1.6	2.2	0.6
Social sciences...	100.0	78.2	8.3	5.5	3.4	0.6	0.9	2.0	0.6
Non-S&E, total...	100.0	80.7	4.9	6.9	4.3	1.1	1.1	2.0	0.6
Health...	100.0	80.8	8.5	5.4	3.1	0.9	0.7	1.5	0.5
Humanities...	100.0	84.1	4.2	3.3	4.8	1.2	0.8	2.8	0.4
Education...	100.0	79.8	3.2	10.0	4.6	1.3	1.6	1.7	0.9
Professional/other ...	100.0	75.8	9.4	6.4	2.7	0.6	0.7	1.5	0.6

¹ Total includes those of other or unknown race/ethnicity not shown separately.

SOURCE: National Science Foundation/Division of Science Resources Studies, Survey of Earned Doctorates.

**Appendix table 4-14 . Doctoral degrees earned by women U.S. citizens and permanent residents,
by race/ethnicity and field: 1975–97**

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Year	Total, all fields	Science and engi- neering, total	Engi- neering	Physical sciences	Earth, atmo- spheric, and ocean sciences	Mathe- matics	Computer science	Agricultural science	Biological sciences	Psych- ology	Social sciences	Non- science and engi- neering
U.S. citizens and permanent residents, total												
1975	6,716	2,651	39	209	30	90	0	37	747	818	681	4,065
1976	7,132	2,808	42	197	54	95	0	40	712	913	755	4,324
1977	7,226	2,884	57	196	51	96	4	35	701	1,027	717	4,342
1978	7,647	3,082	36	206	56	96	7	39	795	1,055	792	4,565
1979	8,190	3,355	44	247	52	99	27	56	860	1,173	797	4,835
1980	8,666	3,594	74	271	60	86	20	79	954	1,242	808	5,072
1981	9,009	3,748	68	252	48	86	24	92	995	1,391	792	5,261
1982	9,144	3,874	88	284	96	80	17	126	1,037	1,344	802	5,270
1983	9,561	4,214	91	308	86	86	30	105	1,122	1,503	883	5,347
1984	9,629	4,209	101	325	97	86	27	100	1,091	1,520	862	5,420
1985	9,472	4,184	136	347	91	82	24	126	1,078	1,439	861	5,288
1986	9,813	4,367	162	376	76	73	43	123	1,116	1,470	928	5,446
1987	9,871	4,424	174	399	89	77	54	126	1,144	1,529	832	5,447
1988	10,024	4,611	196	410	112	70	46	128	1,252	1,512	885	5,413
1989	10,492	4,921	275	437	120	101	84	164	1,276	1,563	901	5,571
1990	11,248	5,182	276	470	118	93	90	159	1,312	1,772	892	6,066
1991	11,818	5,597	316	454	157	112	94	137	1,390	1,890	1,047	6,221
1992	12,178	5,577	328	514	147	117	83	150	1,438	1,780	1,020	6,601
1993	12,720	6,024	348	521	120	164	109	134	1,584	1,938	1,106	6,696
1994	13,522	6,494	448	625	144	151	94	160	1,743	1,967	1,162	7,028
1995	14,183	6,913	520	708	144	183	143	135	1,860	2,056	1,164	7,270
1996	14,323	6,960	523	610	130	145	91	175	1,941	2,183	1,162	7,363
1997	13,946	6,814	509	581	156	172	98	157	1,895	2,005	1,241	7,132
White, non-Hispanics												
1975	5,872	2,347	34	171	24	80	0	28	651	747	612	3,525
1976	6,147	2,480	35	153	48	85	0	32	613	841	673	3,667
1977	6,197	2,526	46	155	47	82	4	31	616	921	624	3,671
1978	6,390	2,604	30	156	53	80	6	30	663	922	664	3,786
1979	6,816	2,844	36	188	47	85	23	47	731	1,015	672	3,972
1980	7,288	3,070	58	208	53	73	17	69	817	1,086	689	4,218
1981	7,680	3,254	47	209	46	72	21	84	852	1,241	682	4,426
1982	7,844	3,391	74	233	86	66	17	111	909	1,200	695	4,453
1983	8,256	3,684	77	260	72	76	24	89	988	1,329	769	4,572
1984	8,351	3,697	69	272	91	72	24	92	960	1,365	752	4,654
1985	8,125	3,644	106	285	87	70	21	113	951	1,288	723	4,481
1986	8,512	3,818	136	311	73	61	40	110	977	1,313	797	4,694
1987	8,512	3,830	144	334	84	61	45	109	995	1,346	712	4,682
1988	8,665	4,028	163	339	100	59	40	110	1,114	1,351	752	4,637
1989	9,142	4,288	224	374	110	88	67	149	1,120	1,388	768	4,854
1990	9,718	4,522	226	385	109	79	80	146	1,154	1,573	770	5,196
1991	10,032	4,739	235	383	142	84	73	123	1,170	1,661	868	5,293
1992	10,346	4,703	240	399	132	93	69	129	1,221	1,558	862	5,643
1993	10,704	5,012	261	388	110	124	83	115	1,311	1,711	909	5,692
1994	11,036	5,158	305	408	123	118	75	120	1,349	1,701	959	5,878
1995	11,185	5,222	320	447	108	126	104	104	1,347	1,745	921	5,963
1996	11,457	5,353	347	431	109	105	61	137	1,401	1,836	926	6,104
1997	10,903	5,180	331	407	123	131	65	120	1,381	1,652	970	5,723

See SOURCE at end of table.

**Appendix table 4-14 . Doctoral degrees earned by women U.S. citizens and permanent residents,
by race/ethnicity and field: 1975–97**

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Year	Total, all fields	Science and engi- neering, total	Engi- neering	Physical sciences	Earth, atmo- spheric, and ocean sciences	Mathe- matics	Computer science	Agricultural science	Biological sciences	Psych- ology	Social sciences	Non- science and engi- neering
Asians/Pacific Islanders												
1975	161	108	2	24	0	5	0	7	52	10	8	53
1976	184	120	6	31	3	7	0	4	47	10	12	64
1977	171	112	7	27	3	8	0	2	36	18	11	59
1978	214	145	2	30	2	10	0	6	55	14	26	69
1979	227	150	2	33	0	7	2	4	59	14	29	77
1980	276	185	7	39	4	6	0	6	65	30	28	91
1981	259	168	17	24	2	10	2	5	60	21	27	91
1982	279	175	9	34	6	7	0	9	59	22	29	104
1983	300	190	6	28	8	6	4	9	76	21	32	110
1984	292	187	23	34	2	10	2	4	69	22	21	105
1985	304	189	21	41	1	6	0	5	57	21	37	115
1986	295	195	15	41	1	5	3	4	67	24	35	100
1987	344	231	22	36	3	11	6	7	77	31	38	113
1988	365	222	18	42	4	11	6	7	73	27	34	143
1989	363	241	34	36	4	3	10	6	89	27	32	122
1990	397	252	33	42	1	7	7	6	87	31	38	145
1991	559	374	49	48	6	18	15	8	129	44	57	185
1992	628	418	61	80	8	19	12	12	133	39	54	210
1993	730	531	61	97	8	36	19	9	172	51	78	199
1994	1,077	820	119	178	17	26	16	20	269	77	98	257
1995	1,440	1,114	170	211	28	50	30	16	410	78	121	326
1996	1,299	983	133	145	12	36	16	30	408	93	110	316
1997	1,239	896	118	133	20	28	26	18	349	97	107	343
Black, non-Hispanics												
1975	354	71	0	3	1	2	0	0	16	25	24	283
1976	447	88	0	6	0	0	0	1	21	36	24	359
1977	439	97	1	3	0	0	0	2	18	38	35	342
1978	457	116	0	5	0	2	0	1	24	47	37	341
1979	509	131	1	4	0	0	0	1	20	68	37	378
1980	544	136	2	2	0	5	0	0	19	64	44	408
1981	531	134	0	3	0	1	1	0	28	64	37	397
1982	579	137	0	5	0	2	0	1	25	64	40	442
1983	519	142	1	2	0	1	2	1	22	75	38	377
1984	548	160	1	2	1	1	1	3	26	76	49	388
1985	547	138	4	7	0	0	0	1	21	63	42	409
1986	525	152	4	4	0	3	0	3	22	68	48	373
1987	474	130	1	3	1	2	1	3	25	59	35	344
1988	527	137	4	8	0	0	0	5	23	58	39	390
1989	510	153	3	7	1	3	1	1	24	61	52	357
1990	571	149	6	7	2	1	0	1	22	72	38	422
1991	614	194	8	5	1	4	4	1	32	86	53	420
1992	597	170	6	6	1	0	1	4	24	78	50	427
1993	701	208	11	10	0	1	4	4	32	75	71	493
1994	726	216	13	13	1	3	2	6	45	78	55	510
1995	862	270	15	18	0	1	4	6	43	112	71	592
1996	816	253	19	13	2	2	3	0	40	115	59	563
1997	840	280	23	10	2	2	1	5	58	110	70	560

See SOURCE at end of table.

**Appendix table 4-14 . Doctoral degrees earned by women U.S. citizens and permanent residents,
by race/ethnicity and field: 1975–97**

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Year	Total, all fields	Science and engi- neering, total	Engi- neering	Physical sciences	Earth, atmo- spheric, and ocean sciences	Mathe- matics	Computer science	Agricultural science	Biological sciences	Psych- ology	Social sciences	Non- science and engi- neering
Hispanics												
1975	67	16	0	1	0	1	0	1	4	3	6	51
1976	103	17	0	2	0	0	0	1	4	6	4	86
1977	133	39	0	4	0	3	0	0	8	13	11	94
1978	169	52	1	2	0	0	0	2	10	16	21	117
1979	184	62	1	9	0	3	0	2	11	22	14	122
1980	181	55	1	7	1	0	0	4	7	22	13	126
1981	207	68	0	4	0	1	0	1	13	32	17	139
1982	220	77	3	7	2	1	0	2	17	28	17	143
1983	275	115	4	14	0	2	0	1	21	51	22	160
1984	245	92	6	10	0	1	0	0	15	42	18	153
1985	284	114	0	7	1	5	2	4	23	41	31	170
1986	306	118	3	9	1	3	0	6	27	43	26	188
1987	326	141	5	17	1	2	0	4	24	63	25	185
1988	308	149	6	16	4	0	0	2	27	55	39	159
1989	318	155	8	18	3	4	3	3	21	63	32	163
1990	388	178	9	26	4	4	1	6	33	57	38	210
1991	409	186	10	11	2	4	1	3	39	70	46	223
1992	427	205	15	20	6	3	1	4	43	78	35	222
1993	456	222	12	20	2	2	1	5	57	86	37	234
1994	512	230	6	21	2	3	0	12	62	90	34	282
1995	522	232	11	21	6	4	4	5	47	97	37	290
1996	541	272	14	12	6	0	7	4	66	120	43	269
1997	565	262	23	13	4	6	2	2	62	107	38	303
American Indians/Alaskan Natives												
1975	9	3	0	0	0	0	0	0	1	1	1	6
1976	9	1	0	0	0	0	0	0	0	0	1	8
1977	23	9	0	0	0	0	0	0	2	6	1	14
1978	10	3	0	0	0	1	0	0	0	1	1	7
1979	25	6	0	0	0	0	0	0	0	3	3	19
1980	29	8	0	1	0	0	0	0	2	3	2	21
1981	29	7	0	0	0	0	0	0	1	5	1	22
1982	33	12	0	0	0	0	0	1	3	6	2	21
1983	31	6	0	0	0	0	0	0	1	2	3	25
1984	20	5	0	0	0	0	0	0	3	1	1	15
1985	56	20	0	0	0	0	0	0	9	5	6	36
1986	41	19	1	2	1	1	0	0	6	5	3	22
1987	53	21	0	2	0	0	1	0	4	12	2	32
1988	42	15	0	1	1	0	0	2	2	4	5	27
1989	45	20	2	0	2	0	1	1	3	8	3	25
1990	45	18	0	0	1	0	0	0	1	13	3	27
1991	58	19	2	2	1	0	0	0	4	8	2	39
1992	67	27	3	2	0	1	0	0	5	9	7	40
1993	60	18	0	2	0	0	1	0	2	9	4	42
1994	72	24	2	1	0	0	1	0	5	7	8	48
1995	67	25	0	3	0	1	0	0	5	8	8	42
1996	85	34	2	1	0	0	2	3	9	9	8	51
1997	81	31	2	0	1	0	1	0	4	11	12	50

See SOURCE at end of table.

**Appendix table 4-14 . Doctoral degrees earned by women U.S. citizens and permanent residents,
by race/ethnicity and field: 1975–97**

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Year	Total, all fields	Science and engi- neering, total	Engi- neering	Physical sciences	Earth, atmo- spheric, and ocean sciences	Mathe- matics	Computer science	Agricultural science	Biological sciences	Psych- ology	Social sciences	Non- science and engi- neering
Other/unknown race/ethnicity												
1975....	253	106	3	10	5	2	0	1	23	32	30	147
1976....	242	102	1	5	3	3	0	2	27	20	41	140
1977....	263	101	3	7	1	3	0	0	21	31	35	162
1978....	407	162	3	13	1	3	1	0	43	55	43	245
1979....	429	162	4	13	5	4	2	2	39	51	42	267
1980....	348	140	6	14	2	2	3	0	44	37	32	208
1981....	303	117	4	12	0	2	0	2	41	28	28	186
1982....	189	82	2	5	2	4	0	2	24	24	19	107
1983....	180	77	3	4	6	1	0	5	14	25	19	103
1984....	173	68	2	7	3	2	0	1	18	14	21	105
1985....	156	79	5	7	2	1	1	3	17	21	22	77
1986....	134	65	3	9	0	0	0	0	17	17	19	69
1987....	162	71	2	7	0	1	1	3	19	18	20	91
1988....	117	60	5	4	3	0	0	2	13	17	16	57
1989....	114	64	4	2	0	3	2	4	19	16	14	50
1990....	129	63	2	10	1	2	2	0	15	26	5	66
1991....	146	85	12	5	5	2	1	2	16	21	21	61
1992....	113	54	3	7	0	1	0	1	12	18	12	59
1993....	69	33	3	4	0	1	1	1	10	6	7	36
1994....	99	46	3	4	1	1	0	2	13	14	8	53
1995....	107	50	4	8	2	1	1	4	8	16	6	57
1996....	125	65	8	8	1	2	2	1	17	10	16	60
1997....	318	165	12	18	6	5	3	12	41	28	44	153

SOURCE: National Science Foundation/Division of Science Resources Studies, Survey of Earned Doctorates.

Women, Minorities, and Persons With Disabilities in Science and Engineering: 2000

**Appendix table 4-15 . Doctoral degrees earned by male U.S. citizens and permanent residents,
by race/ethnicity and field: 1975–97**

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Year	Total, all fields	Science and engi- neering, total	Engi- neering	Physical sciences	Earth, atmo- spheric, and ocean sciences	Mathe- matics	Computer science	Agricultural science	Biological sciences	Psych- ology	Social sciences	Non- science and engi- neering
U.S. citizens and permanent residents, total												
1975	22,080	12,990	2,098	2,344	497	833	0	596	2,353	1,789	2,480	9,090
1976	21,631	12,552	1,907	2,195	484	708	0	496	2,448	1,855	2,459	9,079
1977	20,261	11,997	1,742	2,066	529	648	21	479	2,370	1,794	2,348	8,264
1978	18,988	11,469	1,550	1,955	484	570	83	534	2,339	1,803	2,151	7,519
1979	18,594	11,356	1,573	1,958	512	504	148	517	2,402	1,722	2,020	7,238
1980	17,846	10,983	1,480	1,764	478	496	149	526	2,476	1,667	1,947	6,863
1981	17,332	10,906	1,403	1,851	440	439	164	537	2,425	1,767	1,880	6,426
1982	16,478	10,465	1,377	1,826	461	419	138	544	2,397	1,579	1,724	6,013
1983	16,073	10,304	1,391	1,886	417	371	177	580	2,202	1,605	1,675	5,769
1984	15,623	10,085	1,412	1,869	398	357	168	560	2,308	1,467	1,546	5,538
1985	15,222	9,881	1,458	1,840	374	336	189	600	2,178	1,425	1,481	5,341
1986	14,706	9,649	1,564	1,790	351	329	206	503	2,125	1,362	1,419	5,057
1987	14,691	9,631	1,739	1,843	346	319	221	506	1,997	1,277	1,383	5,060
1988	14,888	9,887	1,950	1,848	408	316	280	482	2,070	1,217	1,316	5,001
1989	14,535	9,671	1,954	1,694	427	327	312	487	2,024	1,174	1,272	4,864
1990	15,355	10,182	2,070	1,871	417	329	313	528	2,068	1,220	1,366	5,173
1991	15,612	10,317	2,158	1,846	461	406	357	483	2,135	1,128	1,343	5,295
1992	15,812	10,365	2,192	1,843	394	390	406	423	2,130	1,206	1,381	5,447
1993	15,988	10,549	2,349	1,809	384	426	400	372	2,168	1,223	1,418	5,439
1994	17,372	11,693	2,605	2,164	469	506	449	456	2,345	1,169	1,530	5,679
1995	17,876	12,083	2,822	2,133	450	588	473	463	2,469	1,128	1,557	5,793
1996	17,183	11,668	2,860	1,958	428	501	422	401	2,424	1,043	1,631	5,515
1997	16,655	11,190	2,772	1,892	431	444	408	389	2,308	971	1,576	5,464
White, non-Hispanics												
1975	19,090	11,179	1,617	2,009	451	716	0	533	2,099	1,615	2,139	7,911
1976	18,796	10,872	1,489	1,879	441	613	0	455	2,176	1,700	2,119	7,924
1977	17,457	10,349	1,383	1,728	470	567	18	427	2,124	1,620	2,012	7,108
1978	15,952	9,600	1,139	1,594	413	483	71	456	2,039	1,602	1,803	6,352
1979	15,580	9,470	1,121	1,599	453	420	130	456	2,099	1,535	1,657	6,110
1980	15,174	9,266	1,085	1,453	432	423	126	470	2,155	1,476	1,646	5,908
1981	14,790	9,319	1,046	1,548	402	376	141	467	2,163	1,608	1,568	5,471
1982	14,299	9,102	1,026	1,626	424	371	119	505	2,153	1,438	1,440	5,197
1983	13,995	8,987	1,051	1,668	372	319	150	525	2,007	1,456	1,439	5,008
1984	13,528	8,725	1,088	1,619	367	308	139	510	2,085	1,320	1,289	4,803
1985	13,181	8,525	1,082	1,621	338	280	156	546	1,962	1,303	1,237	4,656
1986	12,724	8,333	1,218	1,564	324	282	154	447	1,911	1,235	1,198	4,391
1987	12,610	8,222	1,314	1,622	310	258	184	445	1,764	1,170	1,155	4,388
1988	12,795	8,427	1,492	1,609	380	273	225	408	1,851	1,094	1,095	4,368
1989	12,428	8,213	1,502	1,454	388	281	252	421	1,784	1,065	1,066	4,215
1990	13,160	8,648	1,614	1,623	385	293	259	455	1,821	1,075	1,123	4,512
1991	13,153	8,584	1,602	1,585	415	335	282	422	1,871	991	1,081	4,569
1992	13,279	8,623	1,640	1,574	353	332	309	364	1,847	1,078	1,126	4,656
1993	13,348	8,725	1,764	1,523	345	352	327	323	1,835	1,096	1,160	4,623
1994	13,558	8,731	1,715	1,617	381	361	326	367	1,758	1,029	1,177	4,827
1995	13,534	8,680	1,770	1,475	356	409	349	369	1,772	982	1,198	4,854
1996	13,228	8,646	1,913	1,457	340	373	295	307	1,770	905	1,286	4,582
1997	12,886	8,443	1,931	1,459	347	339	292	290	1,739	812	1,234	4,443

See SOURCE at end of table.

**Appendix table 4-15 . Doctoral degrees earned by male U.S. citizens and permanent residents,
by race/ethnicity and field: 1975–97**

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Year	Total, all fields	Science and engi- neering, total	Engi- neering	Physical sciences	Earth, atmo- spheric, and ocean sciences	Mathe- matics	Computer science	Agricultural science	Biological sciences	Psych- ology	Social sciences	Non- science and engi- neering
Asians/Pacific Islanders												
1975	864	706	273	147	18	57	0	39	89	11	72	158
1976	791	682	273	150	18	42	0	16	100	12	71	109
1977	739	633	242	133	18	34	0	19	104	15	68	106
1978	818	690	270	149	23	33	4	31	96	14	70	128
1979	875	734	304	135	21	39	7	19	106	22	81	141
1980	826	683	271	125	18	36	9	22	105	20	77	143
1981	814	659	268	125	12	30	14	20	96	20	74	155
1982	725	593	237	97	21	25	12	14	100	9	78	132
1983	742	590	241	108	18	28	16	24	88	23	44	152
1984	731	591	229	111	16	20	18	16	89	21	71	140
1985	766	620	260	111	18	27	17	19	94	23	51	146
1986	766	621	247	106	13	23	34	18	101	18	61	145
1987	824	694	305	107	15	30	20	31	93	17	76	130
1988	870	694	314	96	10	22	38	23	98	20	73	176
1989	905	745	327	120	19	21	42	17	112	28	59	160
1990	909	757	326	122	14	20	41	26	113	22	73	152
1991	972	806	356	124	11	39	51	16	132	15	62	166
1992	1,136	927	390	147	19	33	74	25	136	20	83	209
1993	1,287	1,079	466	168	14	43	58	20	198	22	90	208
1994	2,469	2,169	748	422	72	116	101	52	451	32	175	300
1995	2,869	2,557	863	540	76	158	107	62	515	44	192	312
1996	2,398	2,108	762	359	65	104	95	51	480	31	161	290
1997	1,901	1,631	586	271	51	71	80	45	368	31	128	270
Black, non-Hispanics												
1975	702	224	16	31	0	9	0	5	33	53	77	478
1976	699	211	21	19	0	5	0	7	32	49	78	488
1977	752	245	14	29	2	9	0	13	18	57	103	507
1978	647	235	13	32	4	11	0	10	31	52	82	412
1979	603	216	19	33	3	11	1	8	15	47	79	387
1980	560	195	16	14	1	7	0	7	32	55	63	365
1981	579	212	19	21	4	8	1	11	22	49	77	367
1982	565	218	20	21	3	4	1	6	24	51	88	347
1983	486	196	28	23	1	2	1	11	24	37	69	290
1984	508	216	14	32	2	3	2	15	24	45	79	292
1985	496	236	30	20	4	7	3	15	32	42	83	260
1986	431	187	20	23	0	3	1	13	26	43	58	244
1987	436	189	24	17	1	9	1	10	35	34	58	247
1988	443	224	27	26	3	4	2	15	25	47	75	219
1989	453	214	30	24	3	5	0	13	33	36	70	239
1990	479	225	34	23	1	3	1	14	29	43	77	254
1991	552	270	47	27	2	7	4	16	32	44	91	282
1992	519	238	43	19	5	4	4	10	38	28	87	281
1993	579	261	39	31	4	7	2	12	43	44	79	318
1994	553	284	41	33	5	8	8	16	34	46	93	269
1995	615	290	56	25	3	4	7	11	65	39	80	325
1996	641	323	55	47	2	6	9	25	58	39	82	318
1997	636	327	74	40	7	5	3	19	51	42	86	309

See SOURCE at end of table.

**Appendix table 4-15 . Doctoral degrees earned by male U.S. citizens and permanent residents,
by race/ethnicity and field: 1975-97**

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Year	Total, all fields	Science and engi- neering, total	Engi- neering	Physical sciences	Earth, atmo- spheric, and ocean sciences	Mathe- matics	Computer science	Agricultural science	Biological sciences	Psych- ology	Social sciences	Non- science and engi- neering
Hispanics												
1975	280	135	18	18	5	7	0	4	29	29	25	145
1976	271	122	16	16	0	9	0	3	22	22	34	149
1977	356	164	24	30	12	9	0	4	18	27	40	192
1978	384	181	32	21	5	7	0	8	22	37	49	203
1979	363	172	23	24	6	7	2	4	28	28	50	191
1980	309	162	26	20	3	5	1	1	24	34	48	147
1981	322	172	16	26	6	4	0	15	28	34	43	150
1982	397	197	33	18	5	5	1	5	30	46	54	200
1983	333	169	25	12	11	5	0	5	22	43	46	164
1984	360	206	28	37	2	10	3	8	29	42	47	154
1985	350	182	22	23	5	7	4	8	36	28	49	168
1986	373	227	32	32	3	9	7	11	39	47	47	146
1987	382	216	29	39	4	9	4	11	38	32	50	166
1988	385	248	57	47	3	4	2	19	49	38	29	137
1989	376	227	39	41	6	7	1	15	50	30	38	149
1990	449	290	45	46	9	6	4	17	56	52	55	159
1991	458	306	50	54	14	5	11	12	56	52	52	152
1992	482	308	56	52	10	9	7	14	59	55	46	174
1993	517	320	54	59	11	14	6	15	57	45	59	197
1994	518	318	60	69	6	10	7	13	69	43	41	200
1995	539	339	66	52	7	11	2	16	80	48	57	200
1996	564	351	84	54	13	10	9	9	65	53	54	213
1997	616	383	72	51	12	12	14	19	83	62	58	233
American Indians/Alaskan Natives												
1975	27	10	1	0	0	3	0	0	0	4	2	17
1976	31	10	0	0	0	0	0	1	2	4	3	21
1977	43	22	1	6	0	1	0	1	5	3	5	21
1978	50	19	2	4	0	0	0	2	5	2	4	31
1979	56	23	3	1	2	0	1	0	3	7	6	33
1980	46	19	3	2	2	0	0	1	3	3	5	27
1981	56	21	4	1	0	1	0	1	5	4	5	35
1982	44	27	3	3	0	1	1	2	4	10	3	17
1983	51	24	1	6	2	0	1	1	3	7	3	27
1984	54	27	3	4	0	3	0	1	7	5	4	27
1985	40	21	1	3	1	0	0	4	4	5	3	19
1986	58	33	5	3	1	0	0	0	11	4	9	25
1987	62	32	7	5	0	0	2	2	7	4	5	30
1988	52	29	4	5	1	2	1	4	4	3	5	23
1989	49	33	5	10	4	0	1	1	4	3	5	16
1990	52	25	4	3	0	1	0	4	3	6	4	27
1991	74	37	4	8	2	0	1	4	6	5	7	37
1992	82	42	8	10	1	1	2	0	8	6	6	40
1993	60	25	2	3	4	1	0	1	5	6	3	35
1994	71	40	4	5	1	2	0	1	11	5	11	31
1995	82	44	10	6	0	1	0	2	10	6	9	38
1996	102	62	12	5	2	1	2	2	12	9	17	40
1997	70	40	10	9	1	1	0	4	5	6	4	30

See SOURCE at end of table.

**Appendix table 4-15 . Doctoral degrees earned by male U.S. citizens and permanent residents,
by race/ethnicity and field: 1975–97**

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Year	Total, all fields	Science and engi- neering, total	Engi- neering	Physical sciences	Earth, atmo- spheric, and ocean sciences	Mathe- matics	Computer science	Agricultural science	Biological sciences	Psych- ology	Social sciences	Non- science and engi- neering
Other/unknown race/ethnicity												
1975	1,117	736	173	139	23	41	0	15	103	77	165	381
1976	1,043	655	108	131	25	39	0	14	116	68	154	388
1977	914	584	78	140	27	28	3	15	101	72	120	330
1978	1,137	744	94	155	39	36	8	27	146	96	143	393
1979	1,117	741	103	166	27	27	7	30	151	83	147	376
1980	931	658	79	150	22	25	13	25	157	79	108	273
1981	771	523	50	130	16	20	8	23	111	52	113	248
1982	448	328	58	61	8	13	4	12	86	25	61	120
1983	466	338	45	69	13	17	9	14	58	39	74	128
1984	442	320	50	66	11	13	6	10	74	34	56	122
1985	389	297	63	62	8	15	9	8	50	24	58	92
1986	354	248	42	62	10	12	10	14	37	15	46	106
1987	377	278	60	53	16	13	10	7	60	20	39	99
1988	343	265	56	65	11	11	12	13	43	15	39	78
1989	324	239	51	45	7	13	16	20	41	12	34	85
1990	306	237	47	54	8	6	8	12	46	22	34	69
1991	403	314	99	48	17	20	8	13	38	21	50	89
1992	314	227	55	41	6	11	10	10	42	19	33	87
1993	197	139	24	25	6	9	7	1	30	10	27	58
1994	203	151	37	18	4	9	7	7	22	14	33	52
1995	237	173	57	35	8	5	8	3	27	9	21	64
1996	250	178	34	36	6	7	12	7	39	6	31	72
1997	546	366	99	62	13	16	19	12	62	18	66	179

SOURCE: National Science Foundation/Division of Science Resources Studies, Survey of Earned Doctorates.

Women, Minorities, and Persons With Disabilities in Science and Engineering: 2000

**Appendix table 4-16. Recipients of science and engineering doctorates,
by disability status: 1989–97, selected years**

Disability status	1989	1993	1994	1995	1996	1997
Total, science and engineering.....	21,731	25,441	26,202	26,535	27,230	26,847
Number reporting disability.....	200	331	373	357	284	318
Percentage reporting disability.....	0.9	1.3	1.4	1.3	1.0	1.2
Science.....	17,188	19,743	20,380	20,527	20,925	20,795
Number reporting disability.....	175	286	314	294	246	278
Percentage reporting disability.....	1.0	1.4	1.5	1.4	1.2	1.3
Engineering.....	4,543	5,698	5,822	6,008	6,305	6,052
Number reporting disability.....	25	45	59	63	38	40
Percentage reporting disability.....	0.6	0.8	1.0	1.0	0.6	0.7

NOTE: Because survey forms differed prior to 1989 and in 1990 and 1991, and because some respondents in 1992 filled out the 1991 form, data for those years are not included in the table.

SOURCE: National Science Foundation/Division of Science Resources Studies, Survey of Earned Doctorates.

Appendix table 4-17. Recipients of science and engineering doctorates, by field and disability status: 1997

Field	Number			Percentage		
	Total, all doctorates	Persons with no disabilities	Persons with disabilities	Total, all doctorates	Persons with no disabilities	Persons with disabilities
Total, science and engineering...	26,847	20,517	318	100.0	100.0	100.0
Computer science...	889	876	13	3.3	4.3	4.1
Mathematics and statistics...	1,112	1,102	10	4.1	5.4	3.1
Physical sciences...	3,711	3,679	32	13.8	17.9	10.1
Earth, atmospheric & ocean sciences...	862	853	9	3.2	4.2	2.8
Agricultural sciences...	966	959	7	3.6	4.7	2.2
Biological sciences...	5,717	5,668	49	21.3	27.6	15.4
Psychology...	3,489	3,408	81	13.0	16.6	25.5
Social sciences...	4,049	3,972	77	15.1	19.4	24.2
Engineering...	6,052	6,012	40	22.5	29.3	12.6

SOURCE: National Science Foundation/Division of Science Resources Studies, Survey of Earned Doctorates.

Women, Minorities, and Persons With Disabilities in Science and Engineering: 2000

Appendix table 4-18. Percentage distribution of definite postgraduation plans of science and engineering doctorate recipients, by sex and major field: 1997 [U.S. citizens and permanent residents]

Field	Total with definite plans	In the United States					Abroad	Location unknown
		Total in U.S.	Postdoctoral study	Academic employment	Industry employment	Other		
All such recipients								
Science and engineering, total...	100.0	92.6	36.0	19.0	21.2	16.3	4.1	3.4
Engineering, total...	100.0	93.4	16.3	10.6	50.4	16.1	3.4	3.2
Sciences, total	100.0	92.4	40.4	20.9	14.8	16.4	4.2	3.4
Physical sciences	100.0	94.3	49.8	9.0	27.8	7.8	4.2	1.4
Earth, atmospheric, and ocean sciences	100.0	89.2	36.4	15.6	15.4	21.8	6.9	3.8
Mathematics	100.0	90.7	21.2	38.0	18.6	12.9	5.2	4.1
Computer sciences	100.0	93.4	12.2	25.5	44.9	10.6	2.4	4.3
Biological sciences	100.0	92.3	67.7	9.2	4.7	10.8	4.4	3.3
Agricultural sciences	100.0	89.6	28.3	23.3	22.3	15.7	6.6	3.8
Psychology	100.0	95.1	29.7	20.8	14.8	29.8	1.2	3.7
Social sciences	100.0	89.0	9.1	48.8	10.3	20.8	6.4	4.6
Non-science and engineering, total...	100.0	92.1	4.4	49.0	6.5	32.1	2.8	5.2
Women								
Science and engineering, total...	100.0	93.1	39.3	22.6	14.2	17.0	3.3	3.6
Engineering, total...	100.0	91.7	17.0	17.0	46.6	11.1	3.4	4.9
Sciences, total	100.0	93.2	41.1	23.0	11.6	17.5	3.3	3.5
Physical sciences	100.0	96.7	47.0	13.4	28.3	8.0	2.3	1.0
Earth, atmospheric, and ocean sciences	100.0	87.1	38.6	21.8	7.9	18.8	9.9	3.0
Mathematics	100.0	94.7	21.1	43.0	19.3	11.4	1.8	3.5
Computer sciences	100.0	85.9	11.3	36.6	32.4	5.6	4.2	9.9
Biological sciences	100.0	93.2	71.3	9.7	3.1	9.1	4.0	2.8
Agricultural sciences	100.0	87.8	29.3	22.0	23.2	13.4	7.3	4.9
Psychology	100.0	94.9	31.3	20.8	14.2	28.6	1.0	4.1
Social sciences	100.0	90.5	9.3	50.9	9.3	21.0	5.2	4.3
Non-science and engineering, total...	100.0	92.7	4.6	49.2	6.0	32.9	1.9	5.3
Men								
Science and engineering, total...	100.0	92.2	34.1	16.9	25.3	15.9	4.5	3.2
Engineering, total...	100.0	93.7	16.2	9.4	51.1	17.0	3.4	2.9
Sciences, total	100.0	91.8	39.9	19.3	17.0	15.6	4.9	3.3
Physical sciences	100.0	93.6	50.7	7.7	27.6	7.7	4.8	1.5
Earth, atmospheric, and ocean sciences	100.0	90.0	35.6	13.5	18.0	22.8	5.9	4.2
Mathematics	100.0	89.0	21.2	35.9	18.3	13.6	6.6	4.4
Computer sciences	100.0	95.1	12.5	23.0	47.9	11.8	2.0	3.0
Biological sciences	100.0	91.6	64.8	8.7	5.9	12.1	4.7	3.7
Agricultural sciences	100.0	90.3	28.0	23.7	22.0	16.5	6.4	3.4
Psychology	100.0	95.4	26.5	20.8	15.9	32.2	1.6	3.0
Social sciences	100.0	87.8	8.9	47.2	11.1	20.6	7.3	4.9
Non-science and engineering, total...	100.0	91.2	4.2	48.8	7.0	31.1	3.9	5.0

SOURCE: National Science Foundation/Division of Science Resources Studies, Survey of Earned Doctorates.

Appendix table 4-19. Science and engineering postdoctoral fellows, by sex and field: 1979-97

Page 1 of 2

Year	Science and engineering, total	Engineering, total	Physical sciences	Earth, atmospheric & ocean sciences	Computer science	Mathematics	Agricultural sciences	Biological sciences	Psychology	Social sciences
Total										
1979	13,549	1,067	4,026	315	38	162	227	6,863	454	397
1980	13,996	977	4,260	310	43	162	259	7,083	475	427
1981	14,711	1,033	4,432	340	34	113	292	7,678	471	318
1982	14,617	974	4,252	336	46	194	293	7,719	520	283
1983	15,606	1,103	4,415	416	80	170	308	8,337	436	341
1984	16,124	1,201	4,365	489	58	203	375	8,688	422	323
1985	16,873	1,354	4,503	375	68	226	372	9,128	498	349
1986	17,859	1,400	4,813	417	72	201	412	9,702	520	322
1987	18,777	1,443	4,945	420	99	229	442	10,361	459	379
1988	19,690	1,685	5,185	493	91	284	464	10,670	498	320
1989	20,868	1,912	5,356	450	78	224	517	11,428	536	367
1990	21,773	1,939	5,566	591	71	248	524	11,932	464	438
1991	22,813	2,243	5,691	623	120	206	565	12,479	507	379
1992	23,829	2,351	5,758	690	144	201	630	13,172	523	360
1993	24,605	2,434	5,640	762	164	224	698	13,785	520	378
1994	25,734	2,590	5,849	815	183	239	705	14,417	546	390
1995	26,087	2,628	5,829	845	213	259	688	14,672	577	376
1996	26,513	2,662	5,803	859	247	326	665	14,918	589	444
1997	26,806	2,938	5,836	934	315	303	692	14,872	560	356
Women										
1979	2,517	50	384	30	2	20	28	1,706	156	141
1980	2,673	65	429	35	2	14	33	1,802	173	120
1981	2,946	81	475	33	6	13	36	2,021	181	100
1982	3,231	82	511	50	9	16	35	2,199	218	111
1983	3,450	88	532	62	9	16	57	2,397	177	112
1984	3,606	84	489	66	9	28	71	2,603	155	101
1985	3,940	101	595	57	10	29	73	2,736	225	114
1986	4,349	131	632	62	10	26	93	3,056	224	115
1987	4,667	149	665	63	13	32	99	3,329	192	125
1988	4,911	171	713	85	11	37	110	3,452	216	116
1989	5,311	175	749	70	14	28	133	3,803	209	130
1990	5,638	205	794	94	9	30	138	3,992	221	155
1991	5,953	237	835	111	20	29	131	4,205	237	148
1992	6,425	250	836	154	32	26	157	4,594	250	126
1993	6,764	281	843	163	29	33	171	4,881	225	138
1994	7,283	334	872	172	31	47	184	5,245	243	155
1995	7,475	320	932	184	29	42	165	5,363	278	162
1996	7,612	313	929	183	48	50	157	5,448	283	201
1997	7,779	344	1,022	220	46	40	186	5,508	274	139

See explanatory information and SOURCE at end of table.

Appendix table 4-19. Science and engineering postdoctoral fellows, by sex and field: 1979-97

Page 2 of 2

Year	Science and engineering, total	Engineering, total	Physical sciences	Earth, atmospheric & ocean sciences	Computer science	Mathematics	Agricultural sciences	Biological sciences	Psychology	Social sciences
Men										
1979	11,032	1,017	3,642	285	36	142	199	5,157	298	256
1980	11,323	912	3,831	275	41	148	226	5,281	302	307
1981	11,765	952	3,957	307	28	100	256	5,657	290	218
1982	11,386	892	3,741	286	37	178	258	5,520	302	172
1983	12,156	1,015	3,883	354	71	154	251	5,940	259	229
1984	12,518	1,117	3,876	423	49	175	304	6,085	267	222
1985	12,933	1,253	3,908	318	58	197	299	6,392	273	235
1986	13,510	1,269	4,181	355	62	175	319	6,646	296	207
1987	14,110	1,294	4,280	357	86	197	343	7,032	267	254
1988	14,779	1,514	4,472	408	80	247	354	7,218	282	204
1989	15,557	1,737	4,607	380	64	196	384	7,625	327	237
1990	16,135	1,734	4,772	497	62	218	386	7,940	243	283
1991	16,860	2,006	4,856	512	100	177	434	8,274	270	231
1992	17,404	2,101	4,922	536	112	175	473	8,578	273	234
1993	17,841	2,153	4,797	599	135	191	527	8,904	295	240
1994	18,451	2,256	4,977	643	152	192	521	9,172	303	235
1995	18,612	2,308	4,897	661	184	217	523	9,309	299	214
1996	18,901	2,349	4,874	676	199	276	508	9,470	306	243
1997	19,027	2,594	4,814	714	269	263	506	9,364	286	217
Percent women										
1979	18.6	4.7	9.5	9.5	5.3	12.3	12.3	24.9	34.4	35.5
1980	19.1	6.7	10.1	11.3	4.7	8.6	12.7	25.4	36.4	28.1
1981	20.0	7.8	10.7	9.7	17.6	11.5	12.3	26.3	38.4	31.4
1982	22.1	8.4	12.0	14.9	19.6	8.2	11.9	28.5	41.9	39.2
1983	22.1	8.0	12.0	14.9	11.3	9.4	18.5	28.8	40.6	32.8
1984	22.4	7.0	11.2	13.5	15.5	13.8	18.9	30.0	36.7	31.3
1985	23.4	7.5	13.2	15.2	14.7	12.8	19.6	30.0	45.2	32.7
1986	24.4	9.4	13.1	14.9	13.9	12.9	22.6	31.5	43.1	35.7
1987	24.9	10.3	13.4	15.0	13.1	14.0	22.4	32.1	41.8	33.0
1988	24.9	10.1	13.8	17.2	12.1	13.0	23.7	32.4	43.4	36.3
1989	25.5	9.2	14.0	15.6	17.9	12.5	25.7	33.3	39.0	35.4
1990	25.9	10.6	14.3	15.9	12.7	12.1	26.3	33.5	47.6	35.4
1991	26.1	10.6	14.7	17.8	16.7	14.1	23.2	33.7	46.7	39.1
1992	27.0	10.6	14.5	22.3	22.2	12.9	24.9	34.9	47.8	35.0
1993	27.5	11.5	14.9	21.4	17.7	14.7	24.5	35.4	43.3	36.5
1994	28.3	12.9	14.9	21.1	16.9	19.7	26.1	36.4	44.5	39.7
1995	28.7	12.2	16.0	21.8	13.6	16.2	24.0	36.6	48.2	43.1
1996	28.7	11.8	16.0	21.3	19.4	15.3	23.6	36.5	48.0	45.3
1997	29.0	11.7	17.5	23.6	14.6	13.2	26.9	37.0	48.9	39.0

SOURCE: National Science Foundation/Division of Science Resources Studies, Survey of Graduate Students and Postdoctorates in Science and Engineering.

**Appendix table 4-20. Percentage distribution of science and engineering doctorate recipients,
by postdoctoral plans and race/ethnicity: 1997 [U.S. citizens and permanent residents]**

Postdoctoral status	Total	White, non-Hispanic	Asian/Pacific Islander	Black, non-Hispanic	Hispanic	American Indian/Alaskan Native	Unknown race
Definite plans...	65.2	67.1	59.6	59.5	65.8	58.3	41.2
Definite plans in the United States...	62.4	64.4	56.4	57.8	62.6	58.3	37.4
Definite plans for postdoctoral study in the U.S.	41.3	40.2	49.9	29.4	39.7	28.6	39.6
Definite U.S. employment: postsecondary/medical school...	22.8	24.8	8.7	34.8	27.9	33.9	20.9
Definite U.S. employment: industry/self...	22.9	21.0	35.0	17.4	18.5	17.9	20.9
Definite U.S. employment: other...	13.0	14.0	6.3	18.3	13.8	19.6	18.7
Definite plans abroad...	2.7	2.7	2.8	1.7	3.2	0.0	2.9
Definite plans location unknown/unreported...	0.1	0.1	0.3	0.0	0.0	0.0	0.8

SOURCE: National Science Foundation/Division of Science Resources Studies, Survey of Earned Doctorates.

Women, Minorities, and Persons With Disabilities in Science and Engineering: 2000

Appendix table 4-21. Number and percentage distribution of definite postgraduation plans of science and engineering (S&E) doctorate recipients, by disability status: 1997 [U.S. citizens and permanent residents]

Disability status	Total with definite plans	In the United States					Abroad	Location unknown
		Total in U.S.	Postdoctoral study	Academic employment	Industry employment	Other		
Number								
Total...	11,875	10,991	4,278	2,255	2,519	1,939	484	400
With disabilities...	148	135	42	34	26	33	6	7
With no disabilities...	11,727	10,856	4,236	2,221	2,493	1,906	478	393
Percentage distribution								
Total...	100.0	92.6	36.0	19.0	21.2	16.3	4.1	3.4
With disabilities...	100.0	91.2	28.4	23.0	17.6	22.3	4.1	4.7
With no disabilities...	100.0	92.6	36.1	18.9	21.3	16.3	4.1	3.4

SOURCE: National Science Foundation/Division of Science Resources Studies, Survey of Earned Doctorates.

Appendix table 5-1. Scientists and engineers in the U.S. labor force, by occupation, sex, and highest degree: 1997

Occupation	All degrees			Bachelor's			Master's			Doctorate		
	Total	Women	Men	Total	Women	Men	Total	Women	Men	Total	Women	Men
Total scientists and engineers...	3,422,200	780,300	2,641,900	1,948,600	406,000	1,542,600	981,900	256,800	725,000	460,900	107,900	352,900
Computer/mathematical scientists...	1,054,000	287,500	766,600	685,800	192,500	493,300	304,600	83,300	221,300	59,900	10,900	49,000
Computer scientists...	946,400	250,500	695,900	660,200	183,300	476,800	256,600	62,900	193,700	26,300	3,700	22,600
Mathematical scientists...	35,300	12,100	23,200	12,200	3,900	8,300	16,100	6,400	9,700	7,100	1,800	5,300
Postsecondary computer/mathematics teachers...	72,300	24,900	47,400	13,500	5,400	8,200	32,000	14,100	17,900	26,600	5,400	21,200
Life and related scientists...	329,200	119,200	209,900	128,300	53,100	75,200	71,400	30,700	40,700	114,200	31,800	82,400
Agricultural/food scientists...	43,800	11,000	32,800	22,700	6,100	16,600	11,000	3,400	7,600	10,000	1,600	8,400
Biological scientists...	187,100	78,500	108,600	75,300	38,000	37,400	38,400	17,900	20,600	66,100	20,400	45,700
Environmental scientists...	20,200	3,200	17,000	14,600	2,700	11,900	4,200	300	3,800	1,200	200	1,100
Postsecondary life science teachers...	78,100	26,500	51,600	15,600	6,300	9,300	17,900	9,200	8,700	36,900	9,800	27,200
Physical and related scientists...	289,400	63,400	226,000	134,000	35,600	98,400	70,100	16,900	53,200	84,900	10,800	74,100
Chemists...	121,800	32,600	89,200	71,600	22,100	49,500	20,700	6,100	14,600	29,500	4,500	25,000
Earth/geology/oceanographers...	69,800	11,200	58,600	35,600	5,900	29,700	23,400	4,100	19,300	10,700	1,200	9,500
Physicists and astronomers...	31,800	3,100	28,700	7,500	600	6,800	9,100	1,500	7,600	15,200	1,000	14,200
Other physical scientists...	17,400	5,600	11,700	8,700	2,900	5,800	7,100	2,600	4,500	1,400	100	1,300
Postsecondary physical science teachers...	48,600	10,800	37,800	10,700	4,100	6,600	9,800	2,700	7,100	28,100	4,000	24,100
Social and related scientists...	352,400	183,500	169,000	68,800	39,400	29,400	153,000	90,200	62,800	121,500	48,900	72,700
Economists...	45,800	15,600	30,100	16,500	8,100	8,400	21,100	5,700	15,400	7,900	1,600	6,300
Political scientists...	9,300	3,800	5,500	5,100	2,100	2,900	3,300	1,500	1,800	900	200	800
Psychologists...	183,200	115,500	67,800	26,200	17,000	9,200	96,300	67,300	28,900	54,500	27,600	26,900
Sociologists/anthropologists...	16,000	8,800	7,300	7,000	4,200	2,800	5,400	2,700	2,700	3,600	1,800	1,700
Other social scientists...	12,100	7,400	4,700	4,800	2,700	2,100	3,700	2,100	1,600	2,700	1,600	1,100
Postsecondary social science teachers...	85,900	32,300	53,600	9,300	5,200	4,000	23,300	10,800	12,400	51,900	16,000	35,900
Engineers...	1,397,100	126,800	1,270,300	931,700	85,400	846,300	382,700	35,700	347,000	80,300	5,500	74,800
Aerospace engineers...	73,600	5,700	68,000	41,500	3,700	37,800	27,600	1,700	26,000	4,400	300	4,100
Chemical engineers...	77,400	10,600	66,800	49,700	7,600	42,100	20,400	2,500	18,000	7,300	600	6,700
Civil engineers...	210,000	19,600	190,400	153,100	14,900	138,200	52,200	4,500	47,800	4,000	200	3,800
Electrical engineers...	371,100	24,600	346,400	244,000	16,200	227,800	109,100	7,500	101,600	16,900	900	16,100
Industrial engineers...	81,400	8,900	72,400	60,100	6,500	53,600	19,600	2,200	17,400	1,400	200	1,200
Mechanical engineers...	274,500	16,600	257,900	202,300	11,800	190,500	62,900	4,500	58,400	9,100	300	8,800
Other engineers...	274,900	37,600	237,300	175,500	23,900	151,600	81,200	11,800	69,400	17,900	1,700	16,200
Postsecondary engineering teachers...	34,300	3,200	31,100	5,500	800	4,700	9,700	1,100	8,600	19,200	1,400	17,800

NOTE: Figures are rounded to nearest hundred. Details may not add to total because of rounding. Total includes "professional and other degrees" not shown separately. The term "scientists and engineers" includes all persons who have ever received a bachelor's degree or higher in a science or engineering field, plus persons holding a non-science and -engineering bachelor's or higher degree who were employed in a science or engineering occupation.

SOURCE: National Science Foundation/Division of Science Resources Studies, 1997 SESTAT (Scientists and Engineers Statistical Data System).

Appendix table 5-2. Scientists and engineers in the U.S. labor force, by occupation, race/ethnicity, and highest degree: 1997

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Occupation	All degrees						Bachelor's					
	Total	White	Asian/ Pacific Islander	Black	Hispanic	American Indian/ Alaskan Native	Total	White	Asian/ Pacific Islander	Black	Hispanic	American Indian/ Alaskan Native
Total scientists and engineers...	3,422,200	2,832,200	356,900	115,200	106,200	10,000	1,948,600	1,656,100	146,900	74,300	64,000	6,300
Computer/mathematical scientists...	1,054,000	850,500	128,600	45,400	27,000	1,800	685,800	574,600	57,000	33,500	18,800	1,200
Computer scientists...	946,400	762,200	118,000	40,600	24,100	1,500	660,200	553,200	55,400	32,100	18,300	1,200
Mathematical scientists...	35,300	29,100	3,100	1,700	600	100	12,200	9,800	800	700	100	-
Postsecondary computer/ mathematics teachers...	72,300	59,100	7,500	3,100	2,300	200	13,500	11,600	900	700	400	-
Life and related scientists...	329,200	277,600	33,700	8,200	8,400	1,400	128,300	111,500	8,800	3,400	3,600	900
Agricultural/food scientists...	43,800	39,000	2,700	1,100	900	-	22,700	20,500	800	900	500	-
Biological scientists...	187,100	150,100	25,800	5,100	5,000	1,000	75,300	63,000	6,900	2,300	2,400	700
Environmental scientists...	20,200	19,500	100	100	400	200	14,600	14,300	-	-	200	200
Postsecondary life science teachers...	78,100	69,000	5,100	1,900	2,000	100	15,600	13,700	1,100	200	500	-
Physical and related scientists...	289,400	243,400	28,400	8,400	7,900	1,000	134,000	115,800	8,100	5,500	4,100	500
Chemists...	121,800	95,900	16,600	5,600	3,400	100	71,600	59,300	5,900	4,100	2,200	100
Earth/geology/oceanographers...	69,800	63,000	3,600	1,100	1,900	300	35,600	33,000	1,200	600	700	100
Physicists and astronomers...	31,800	27,000	3,700	400	600	100	7,500	6,700	200	200	400	-
Other physical scientists...	17,400	15,900	600	300	400	200	8,700	8,000	100	200	300	200
Postsecondary physical science teachers...	48,600	41,600	3,900	1,200	1,500	300	10,700	8,800	800	400	600	100
Social and related scientists...	352,400	305,600	13,400	16,900	14,500	2,000	68,800	56,300	2,500	4,800	4,200	900
Economists...	45,800	38,700	4,000	1,400	1,600	-	5,100	4,600	100	100	200	-
Political scientists...	9,300	8,400	300	100	500	-	16,500	14,700	600	800	400	-
Psychologists...	183,200	162,000	2,800	9,300	7,900	1,200	26,200	19,800	800	2,600	2,400	600
Sociologists/anthropologists...	16,000	13,800	400	1,000	600	100	7,000	5,800	-	500	600	100
Other social scientists...	12,100	10,500	500	700	300	200	4,800	3,900	300	200	200	200
Postsecondary social science teachers...	85,900	72,200	5,300	4,300	3,500	500	9,300	7,300	800	600	500	100
Engineers...	1,397,100	1,155,100	152,900	36,400	48,600	3,900	931,700	797,900	70,500	27,100	33,200	2,800
Aerospace engineers...	73,600	62,500	6,500	2,300	1,900	500	41,500	35,300	3,000	1,600	1,200	400
Chemical engineers...	77,400	62,600	9,800	1,800	3,200	100	49,700	42,000	3,900	1,500	2,200	100
Civil engineers...	210,000	170,900	25,400	3,900	9,000	600	153,100	129,600	13,600	3,100	6,300	500
Electrical engineers...	371,100	292,900	52,200	10,900	14,000	1,000	244,000	200,300	25,000	8,700	9,300	800
Industrial engineers...	81,400	67,800	6,000	3,800	3,500	400	60,100	51,300	3,200	3,100	2,400	100
Mechanical engineers...	274,500	234,000	26,200	6,100	7,200	900	202,300	179,500	12,400	4,200	5,500	500
Other engineers...	274,900	238,400	21,000	6,400	8,600	500	175,500	155,800	8,500	4,500	6,300	300
Postsecondary engineering teachers...	34,300	26,000	5,800	1,200	1,300	-	5,500	4,100	900	400	100	-

See explanatory information and SOURCE at end of table.

Appendix table 5-2. Scientists and engineers in the U.S. labor force, by occupation, race/ethnicity, and highest degree: 1997

Occupation	Master's						Doctorate					
	Total	White	Asian/ Pacific Islander	Black	Hispanic	American Indian/ Alaskan Native	Total	White	Asian/ Pacific Islander	Black	Hispanic	American Indian/ Alaskan Native
Total scientists and engineers...	981,900	780,900	137,900	30,400	30,000	2,300	460,900	368,200	70,300	9,700	11,000	1,400
Computer/mathematical scientists...	304,600	228,600	58,600	10,500	6,400	400	59,900	44,600	12,500	1,100	1,600	200
Computer scientists...	256,600	188,400	55,000	8,000	5,000	200	26,300	18,200	7,100	200	700	100
Mathematical scientists...	16,100	13,600	1,300	900	300	100	7,100	5,700	1,100	100	100	-
Postsecondary computer/ mathematics teachers...	32,000	26,600	2,300	1,600	1,100	100	26,600	20,700	4,300	800	800	100
Life and related scientists...	71,400	60,500	6,800	2,500	1,400	200	114,200	92,700	16,800	1,800	2,600	300
Agricultural/food scientists...	11,000	10,000	600	100	200	-	10,000	8,400	1,300	100	200	-
Biological scientists...	38,400	30,600	5,400	1,600	700	100	66,100	50,400	12,800	1,000	1,700	200
Environmental scientists...	4,200	4,000	-	-	100	-	1,200	1,100	100	-	-	-
Postsecondary life science teachers...	17,900	15,800	800	800	400	100	36,900	32,700	2,700	700	700	-
Physical and related scientists...	70,100	58,100	8,000	1,600	1,900	300	84,900	69,100	12,300	1,400	1,900	200
Chemists...	20,700	14,800	4,200	900	600	100	29,500	21,800	6,400	600	600	-
Earth/geology/oceanographers...	23,400	20,700	1,300	400	1,000	100	10,700	9,200	1,100	100	300	100
Physicists and astronomers...	9,100	7,600	1,300	100	100	100	15,200	12,700	2,200	100	200	-
Other physical scientists...	7,100	6,500	300	100	100	-	1,400	1,200	200	-	-	-
Postsecondary physical science teachers...	9,800	8,500	800	200	200	100	28,100	24,300	2,400	600	800	100
Social and related scientists...	153,000	133,500	4,800	7,700	6,600	400	121,500	107,100	6,000	4,400	3,400	700
Economists...	3,300	2,900	100	-	200	-	900	800	100	-	-	-
Political scientists...	21,100	17,400	2,100	500	1,100	-	7,900	6,200	1,400	100	200	-
Psychologists...	96,300	86,000	1,100	5,000	3,900	300	54,500	50,200	1,000	1,700	1,300	300
Sociologists/anthropologists...	5,400	4,700	300	400	-	-	3,600	3,200	100	100	100	-
Other social scientists...	3,700	3,300	100	200	100	-	2,700	2,300	100	200	-	-
Postsecondary social science teachers...	23,300	19,100	1,200	1,500	1,300	100	51,900	44,300	3,300	2,300	1,700	300
Engineers...	382,700	300,200	59,600	8,200	13,600	1,000	80,300	54,800	22,800	1,100	1,500	100
Aerospace engineers...	27,600	23,800	2,400	600	600	100	4,400	3,200	1,100	-	-	-
Chemical engineers...	20,400	15,600	3,700	300	800	-	7,300	5,000	2,200	-	100	-
Civil engineers...	52,200	38,300	10,400	800	2,600	100	4,000	2,400	1,400	100	100	-
Electrical engineers...	109,100	80,700	21,900	2,100	4,300	200	16,900	11,000	5,400	200	300	-
Industrial engineers...	19,600	15,300	2,300	700	1,000	200	1,400	900	500	-	100	-
Mechanical engineers...	62,900	49,000	10,200	1,800	1,500	300	9,100	5,400	3,500	100	100	-
Other engineers...	81,200	70,000	7,400	1,700	2,000	100	17,900	12,400	5,100	100	300	100
Postsecondary engineering teachers...	9,700	7,400	1,300	200	700	-	19,200	14,400	3,600	600	500	-

See explanatory information and SOURCE at end of table.

Appendix table 5-2. Scientists and engineers in the U.S. labor force, by occupation, race/ethnicity, and highest degree: 1997

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KEY: - = Fewer than 50 estimated.

NOTE: Figures are rounded to nearest hundred. Details may not add to total because of rounding. Total includes "professional and other degrees" and "other" race/ethnicity not shown separately. The term "scientists and engineers" includes all persons who have ever received a bachelor's degree or higher in a science or engineering field, plus persons holding a non-science and -engineering bachelor's or higher degree who were employed in a science or engineering occupation.

SOURCE: National Science Foundation/Division of Science Resources Studies, 1997 SESTAT (Scientists and Engineers Statistical Data System).

Women, Minorities, and Persons With Disabilities in Science and Engineering: 2000

Appendix table 5-3. Scientists and engineers in the U.S. labor force, by occupation, race/ethnicity, and sex: 1997

Occupation	Total		White		Asian/Pacific Islander		Black		Hispanic		American Indian/ Alaskan Native	
	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men
	780,300	2,641,900	624,000	2,208,200	83,800	273,100	41,700	73,600	27,600	78,600	2,800	7,300
Total scientists and engineers...												
Computer/mathematical scientists...	287,500	766,600	222,800	627,700	37,800	90,700	17,800	27,600	8,200	18,700	600	1,200
Computer scientists...	250,500	695,900	192,600	569,600	35,000	83,000	15,500	25,100	6,900	17,200	500	1,000
Mathematical scientists...	12,100	23,200	10,000	19,100	1,000	2,100	500	1,200	300	300	-	100
Postsecondary computer/ mathematics teachers...	24,900	47,400	20,100	39,000	1,900	5,600	1,800	1,300	1,000	1,300	100	100
Life and related scientists...	119,200	209,900	97,400	180,200	14,500	19,100	3,400	4,800	3,600	4,800	400	1,000
Agricultural/food scientists...	11,000	32,800	10,000	29,000	500	2,100	100	1,000	300	600	-	-
Biological scientists...	78,500	108,600	61,300	88,800	12,400	13,500	2,300	2,800	2,200	2,800	300	700
Environmental scientists...	3,200	17,000	3,100	16,400	-	100	-	100	100	300	-	200
Postsecondary life science teachers...	26,500	51,600	23,000	46,000	1,600	3,500	900	900	900	1,100	-	100
Physical and related scientists...	63,400	226,000	48,500	195,000	8,900	19,500	3,300	5,200	2,400	5,500	200	800
Chemists...	32,600	89,200	22,700	73,200	6,600	10,000	2,000	3,600	1,100	2,300	-	100
Earth/geology/oceanographers...	11,200	58,600	9,700	53,300	400	3,200	600	400	400	1,500	100	200
Physicists and astronomers...	3,100	28,700	2,500	24,500	400	3,300	100	300	-	600	-	100
Other physical scientists...	5,600	11,700	5,100	10,800	100	500	200	-	200	200	-	200
Postsecondary physical science teachers...	10,800	37,800	8,500	33,100	1,300	2,600	300	800	600	900	100	200
Social and related scientists...	183,500	169,000	158,100	147,500	6,100	7,200	9,400	7,500	8,600	5,900	1,200	800
Economists...	15,600	30,100	12,800	25,900	1,600	2,400	400	1,100	1,000	700	-	-
Political scientists...	115,500	67,800	102,100	59,900	2,100	800	5,400	3,900	5,200	2,700	700	400
Psychologists...	8,800	7,300	7,500	6,300	300	200	600	500	300	400	100	-
Sociologists/anthropologists...	3,800	5,500	3,300	5,100	200	200	100	-	300	200	-	-
Other social scientists...	7,400	4,700	6,100	4,400	400	100	500	100	200	-	100	100
Postsecondary social science teachers...	32,300	53,600	26,400	45,900	1,700	3,600	2,400	1,900	1,600	1,900	200	300
Engineers...	126,800	1,270,300	97,200	1,057,800	16,400	136,500	7,800	28,500	4,900	43,600	400	3,500
Aerospace engineers...	5,700	68,000	4,300	58,100	700	5,700	400	1,900	200	1,700	-	500
Chemical engineers...	10,600	66,800	7,800	54,800	1,800	8,000	700	1,100	300	2,800	-	100
Civil engineers...	19,600	190,400	15,100	155,800	2,800	22,700	600	3,300	900	8,100	100	400
Electrical engineers...	24,600	346,400	16,600	276,300	5,300	46,900	1,900	9,000	700	13,300	100	900
Industrial engineers...	8,900	72,400	7,300	60,500	400	5,500	500	3,300	700	2,800	-	400
Mechanical engineers...	16,600	257,900	13,300	220,700	1,700	24,500	1,100	5,000	400	6,700	-	900
Other engineers...	37,600	237,300	30,200	208,200	3,300	17,700	2,400	3,900	1,600	7,000	100	400
Postsecondary engineering teachers...	3,200	31,100	2,600	23,400	400	5,400	100	1,000	100	1,100	-	-

See explanatory information and SOURCE at end of table.

Appendix table 5-3. Scientists and engineers in the U.S. labor force, by occupation, race/ethnicity, and sex: 1997

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KEY: - = Fewer than 50 estimated.

NOTE: Figures are rounded to nearest hundred. Details may not add to total because of rounding. Total includes "other" race/ethnicity not shown separately. The term "scientists and engineers" includes all persons who have ever received a bachelor's degree or higher in a science or engineering field, plus persons holding a non-science and -engineering bachelor's or higher degree who were employed in a science or engineering occupation.

SOURCE: National Science Foundation/Division of Science Resources Studies, 1997 SESTAT (Scientists and Engineers Statistical Data System).

Women, Minorities, and Persons With Disabilities in Science and Engineering: 2000

Appendix table 5-4. Scientists and engineers in the labor force, by occupation, disability status, and highest degree: 1997

Occupation	All degrees		Bachelor's		Master's		Doctorate	
	Persons without disabilities	Persons with disabilities						
Total scientists and engineers...	3,231,000	191,200	1,840,300	108,400	929,900	52,000	433,000	27,900
Computer/mathematical scientists...	999,900	54,100	650,500	35,300	290,100	14,500	56,300	3,700
Computer scientists...	898,200	48,300	626,300	33,800	244,100	12,400	24,800	1,400
Mathematical scientists...	33,900	1,400	12,000	200	15,200	900	6,700	400
Postsecondary computer/mathematics teachers...	67,800	4,400	12,200	1,300	30,700	1,200	24,700	1,900
Life and related scientists...	309,700	19,500	121,500	6,700	66,900	4,600	107,800	6,400
Agricultural/food scientists...	40,700	3,100	21,500	1,200	9,700	1,300	9,400	600
Biological scientists...	178,600	8,500	71,400	3,900	37,000	1,400	63,200	2,900
Environmental scientists...	18,500	1,700	13,500	1,100	3,700	400	1,100	100
Postsecondary life science teachers...	71,900	6,200	15,100	400	16,500	1,400	34,100	2,800
Physical and related scientists...	273,500	15,900	127,800	6,200	65,100	5,000	80,300	4,600
Chemists...	115,600	6,200	67,600	4,000	19,700	1,000	28,300	1,200
Earth/geology/oceanographers...	66,900	2,900	34,600	1,000	22,300	1,100	9,900	800
Physicists and astronomers...	30,100	1,700	7,100	300	8,400	700	14,600	700
Other physical scientists...	16,800	600	8,500	300	6,900	200	1,300	100
Postsecondary physical science teachers...	44,100	4,500	10,100	600	7,700	2,100	26,300	1,800
Social and related scientists...	330,600	21,800	65,100	3,700	143,600	9,400	113,200	8,400
Economists...	43,000	2,800	15,100	1,400	20,500	700	7,200	700
Political scientists...	9,200	200	5,100	-	3,200	100	900	-
Psychologists...	172,600	10,600	25,000	1,200	89,800	6,500	51,700	2,800
Sociologists/anthropologists...	15,000	1,000	6,600	400	4,900	500	3,400	200
Other social scientists...	11,400	800	4,300	500	3,700	-	2,400	300
Postsecondary social science teachers...	79,400	6,600	9,000	300	21,500	1,700	47,500	4,400
Engineers...	1,317,200	79,900	875,300	56,400	364,200	18,500	75,400	4,800
Aerospace engineers...	69,100	4,500	38,600	2,900	26,500	1,100	3,900	500
Chemical engineers...	72,700	4,700	46,300	3,400	19,600	900	6,900	400
Civil engineers...	194,500	15,400	141,600	11,500	48,800	3,400	3,600	400
Electrical engineers...	351,400	19,700	231,100	12,900	103,300	5,800	16,100	800
Industrial engineers...	75,900	5,500	55,400	4,700	18,700	800	1,400	-
Mechanical engineers...	262,300	12,200	192,500	9,800	60,700	2,200	8,800	200
Other engineers...	258,900	15,900	164,200	11,300	77,800	3,400	16,700	1,300
Postsecondary engineering teachers...	32,400	1,900	5,500	-	8,900	700	18,000	1,100

KEY: - = Fewer than 50 estimated.

NOTE: Figures are rounded to nearest hundred. Details may not add to total because of rounding. Total includes "professional and other degrees" not shown separately. The term "scientists and engineers" includes all persons who have ever received a bachelor's degree or higher in a science or engineering field, plus persons holding a non-science and -engineering bachelor's or higher degree who were employed in a science or engineering occupation.

SOURCE: National Science Foundation/Division of Science Resources Studies, 1997 SESTAT (Scientists and Engineers Statistical Data System).

Appendix table 5-5. Employed scientists and engineers, by sex, race/ethnicity, disability status, and age: 1997

Sex, race/ethnicity, and disability status	Total	Less than 35	35-44	45-54	55 or over
Total...	3,369,300	977,200	1,118,000	832,900	440,900
Sex					
Women...	763,300	269,500	267,800	168,900	57,000
Men...	2,606,000	707,700	850,200	664,000	383,900
Race/ethnicity					
White, non-Hispanic...	2,791,700	766,000	922,000	715,600	387,900
Asian/Pacific Islander...	349,800	128,800	113,500	74,900	32,500
Black, non-Hispanic...	113,000	39,400	41,200	24,000	8,400
Hispanic...	103,500	39,300	37,000	16,700	10,600
American Indian/Alaskan Native...	9,900	3,700	3,000	1,600	1,600
Other...	1,400	-	1,200	100	-
Disability status					
Persons without disabilities...	3,183,300	957,600	1,075,000	758,800	391,700
Persons with disabilities...	186,000	19,600	43,000	74,100	49,200
Percentage distribution:					
Total...	100.0	29.0	33.2	24.7	13.1
Sex					
Women...	100.0	35.3	35.1	22.1	7.5
Men...	100.0	27.2	32.6	25.5	14.7
Race/ethnicity					
White, non-Hispanic...	100.0	27.4	33.0	25.6	13.9
Asian/Pacific Islander...	100.0	36.8	32.5	21.4	9.3
Black, non-Hispanic...	100.0	34.9	36.4	21.3	7.4
Hispanic...	100.0	37.9	35.8	16.1	10.2
American Indian/Alaskan Native...	100.0	37.8	30.5	16.0	15.7
Other...	100.0	3.1	87.6	9.3	-
Disability status					
Persons without disabilities...	100.0	30.1	33.8	23.8	12.3
Persons with disabilities...	100.0	10.6	23.1	39.8	26.5

KEY: - = Fewer than 50 estimated.

NOTE: Figures are rounded to nearest hundred. Percentages are calculated from unrounded numbers. Details may not add to total because of rounding. The term "scientists and engineers" includes all persons who have ever received a bachelor's degree or higher in a science or engineering field, plus persons holding a non-science and -engineering bachelor's or higher degree who were employed in a science or engineering occupation.

SOURCE: National Science Foundation/Division of Science Resources Studies, 1997 SESTAT (Scientists and Engineers Statistical Data System).

Appendix table 5-6. Scientists and engineers with disabilities who are in the labor force, by age at onset of disability: 1997

Age at onset	Number	Percent
Total...	191,200	100.0
Since birth...	15,200	8.0
Younger than 10...	18,100	9.5
10 to 19...	29,100	15.2
20 to 29...	24,000	12.5
30 to 39...	27,800	14.5
40 to 49...	50,900	26.6
50 or older...	26,100	13.7

NOTE: Figures are rounded to nearest hundred. Percentages are calculated from unrounded numbers. Details may not add to total because of rounding. The term "scientists and engineers" includes all persons who have ever received a bachelor's degree or higher in a science or engineering field, plus persons holding a non-science and -engineering bachelor's or higher degree who were employed in a science or engineering occupation.

SOURCE: National Science Foundation/Division of Science Resources Studies, 1997 SESTAT (Scientists and Engineers Statistical Data System).

Women, Minorities, and Persons With Disabilities in Science and Engineering: 2000

Appendix table 5-7. Employment status of scientists and engineers, by age, sex, and race/ethnicity: 1997

Occupation, sex, and race/ethnicity	Total	Employed				Unemployed/ seeking employment	Retired	Not employed/ not seeking employment
		Total	Full-time	Part-time	Postdoctoral appointment			
All ages...	3,898,800	3,369,300	3,081,600	263,500	24,200	52,900	334,300	142,300
Women...	898,400	763,300	628,000	126,700	8,600	17,000	30,400	87,600
Men...	3,000,500	2,606,000	2,453,600	136,800	15,600	35,900	303,900	54,700
White...	3,260,000	2,791,700	2,546,100	229,700	16,000	40,500	312,400	115,400
Asian/Pacific Islander...	384,700	349,800	325,600	17,400	6,800	7,100	12,100	15,700
Black...	126,600	113,000	104,900	7,500	600	2,200	5,100	6,200
Hispanic...	114,900	103,500	94,500	8,200	800	2,700	4,300	4,300
American Indian/Alaskan Native...	10,600	9,900	9,100	700	100	100	300	300
Younger than 35...	1,049,700	977,200	883,400	81,000	12,800	12,900	900	58,700
Women...	307,000	269,500	225,700	39,000	4,800	5,300	900	31,300
Men...	742,700	707,700	657,700	42,000	8,000	7,600	-	27,300
White...	816,900	766,000	692,800	64,500	8,700	8,100	900	41,900
Asian/Pacific Islander...	140,700	128,800	115,600	9,700	3,500	2,600	-	9,400
Black...	44,400	39,400	36,600	2,600	200	800	-	4,200
Hispanic...	43,600	39,300	35,000	3,900	400	1,300	-	3,000
American Indian/Alaskan Native...	3,900	3,700	3,400	300	-	-	-	200
35 to 44...	1,175,400	1,118,000	1,047,800	60,800	9,400	11,800	2,200	43,300
Women...	313,100	267,800	220,100	44,500	3,200	6,900	1,900	36,500
Men...	862,200	850,200	827,800	16,200	6,200	4,900	300	6,800
White...	970,900	922,000	863,800	52,600	5,700	9,100	2,000	37,700
Asian/Pacific Islander...	118,600	113,500	106,100	4,400	3,000	1,900	-	3,200
Black...	43,100	41,200	39,500	1,300	300	400	200	1,300
Hispanic...	38,500	37,000	34,500	2,200	300	400	-	1,000
American Indian/Alaskan Native...	3,200	3,000	2,800	200	-	100	-	100
45 to 54...	872,200	832,900	786,300	45,300	1,300	11,300	4,800	23,200
Women...	186,100	168,900	141,600	26,800	500	3,200	1,400	12,600
Men...	686,000	664,000	644,700	18,400	900	8,100	3,400	10,600
White...	749,600	715,600	673,500	41,200	900	9,000	4,300	20,600
Asian/Pacific Islander...	78,000	74,900	73,400	1,100	300	1,000	200	2,000
Black...	24,700	24,000	21,900	2,100	100	400	200	-
Hispanic...	17,600	16,700	15,800	800	100	600	100	200
American Indian/Alaskan Native...	1,600	1,600	1,500	100	-	-	-	-
55 or older...	801,300	440,900	363,700	76,400	800	16,900	326,400	17,100
Women...	92,000	57,000	40,500	16,400	200	1,500	26,200	7,200
Men...	709,300	383,900	323,200	60,100	600	15,400	300,200	9,900
White...	722,500	387,900	315,900	71,400	700	14,300	305,200	15,200
Asian/Pacific Islander...	47,200	32,500	30,300	2,200	100	1,600	11,900	1,200
Black...	14,400	8,400	7,000	1,400	-	600	4,800	700
Hispanic...	15,200	10,600	9,200	1,400	-	400	4,200	100
American Indian/Alaskan Native...	1,900	1,600	1,400	100	-	100	300	-

KEY: - = Fewer than 50 estimated.

NOTE: Figures are rounded to nearest hundred. Details may not add to total because of rounding. Total includes "other" race/ethnicity not shown separately. The term "scientists and engineers" includes all persons who have ever received a bachelor's degree or higher in a science or engineering field, plus persons holding a non-science and -engineering bachelor's or higher degree who were employed in a science or engineering occupation.

SOURCE: National Science Foundation/Division of Science Resources Studies, 1997 SESTAT (Scientists and Engineers Statistical Data System).

Appendix table 5-8. Employment status of scientists and engineers, by occupation, sex, and race/ethnicity: 1997

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Occupation, sex, and race/ethnicity	Total	Employed				Unemployed/ seeking employment	Retired	Not employed/ not seeking employment
		Total	Full-time	Part-time	Postdoctoral appointment			
Scientists and engineers total.....	3,898,800	3,369,300	3,081,600	263,500	24,200	52,900	334,300	142,300
Women.....	898,400	763,300	628,000	126,700	8,600	17,000	30,400	87,600
White, non-Hispanic.....	725,500	611,300	494,200	111,500	5,600	12,700	27,300	74,200
Asian/Pacific Islander.....	91,400	81,500	72,600	6,600	2,400	2,300	1,300	6,400
Black, non-Hispanic.....	47,100	40,700	36,600	3,800	200	1,000	1,300	4,200
Hispanic.....	30,600	26,800	22,000	4,400	300	900	600	2,300
American Indian/Alaskan Native.....	2,900	2,800	2,400	300	-	-	-	100
Men.....	3,000,500	2,606,000	2,453,600	136,800	15,600	35,900	303,900	54,700
White, non-Hispanic.....	2,534,500	2,180,400	2,051,900	118,100	10,300	27,800	285,200	41,200
Asian/Pacific Islander.....	293,300	268,300	253,000	10,800	4,400	4,800	10,800	9,300
Black, non-Hispanic.....	79,400	72,300	68,200	3,700	400	1,300	3,900	2,000
Hispanic.....	84,300	76,700	72,500	3,800	500	1,900	3,700	2,000
American Indian/Alaskan Native.....	7,700	7,100	6,700	400	-	100	300	200
Computer and mathematical scientists								
Women.....	320,500	280,900	246,700	34,000	200	6,600	8,700	24,300
White, non-Hispanic.....	251,800	217,800	187,100	30,500	200	5,000	7,700	21,200
Asian/Pacific Islander.....	39,800	37,100	35,300	1,800	-	700	300	1,700
Black, non-Hispanic.....	19,100	17,600	16,600	1,000	-	200	500	800
Hispanic.....	8,900	7,700	7,100	600	-	500	200	600
American Indian/Alaskan Native.....	700	600	600	100	-	-	-	100
Men.....	809,200	758,600	726,900	31,100	600	8,000	31,300	11,400
White, non-Hispanic.....	665,300	621,600	594,900	26,300	400	6,100	29,100	8,600
Asian/Pacific Islander.....	93,800	89,400	86,400	2,800	200	1,300	1,400	1,700
Black, non-Hispanic.....	28,900	27,300	26,300	900	-	300	500	800
Hispanic.....	19,200	18,400	17,400	1,000	-	300	200	300
American Indian/Alaskan Native.....	1,200	1,200	1,200	-	-	-	100	-
Life and related scientists								
Women.....	144,500	115,900	94,800	15,000	6,100	3,300	6,200	19,100
White, non-Hispanic.....	117,200	95,200	78,600	12,900	3,800	2,100	5,000	14,900
Asian/Pacific Islander.....	16,800	13,800	10,500	1,300	2,000	700	400	1,800
Black, non-Hispanic.....	5,600	3,000	2,600	300	100	400	700	1,600
Hispanic.....	4,500	3,500	2,700	600	200	100	100	800
American Indian/Alaskan Native.....	400	400	400	-	-	-	-	-
Men.....	242,700	205,900	183,600	13,600	8,700	4,100	20,500	12,300
White, non-Hispanic.....	206,800	177,200	159,300	12,300	5,600	3,100	17,900	8,600
Asian/Pacific Islander.....	22,900	18,500	15,000	900	2,600	600	1,000	2,800
Black, non-Hispanic.....	5,800	4,800	4,300	200	200	-	800	100
Hispanic.....	6,300	4,500	4,100	100	200	300	700	800
American Indian/Alaskan Native.....	1,100	1,000	900	100	-	-	-	100

See explanatory information and SOURCE at end of table

Appendix table 5-8. Employment status of scientists and engineers, by occupation, sex, and race/ethnicity: 1997

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Occupation, sex, and race/ethnicity	Total	Employed				Unemployed/ seeking employment	Retired	Not employed/ not seeking employment
		Total	Full-time	Part-time	Postdoctoral appointment			
Physical and related scientists								
Women.....	79,100	61,800	52,300	8,800	700	1,600	5,600	10,200
White, non-Hispanic.....	62,400	47,300	39,500	7,400	400	1,100	5,200	8,700
Asian/Pacific Islander.....	9,900	8,700	7,600	900	300	200	200	800
Black, non-Hispanic.....	3,600	3,300	3,200	100	-	-	-	300
Hispanic.....	2,800	2,100	1,700	300	-	300	200	300
American Indian/Alaskan Native.....	200	200	100	100	-	-	-	-
Men.....	264,400	223,100	203,100	16,500	3,600	3,000	31,400	7,000
White, non-Hispanic.....	229,700	192,900	176,000	14,300	2,600	2,100	29,600	5,100
Asian/Pacific Islander.....	21,500	19,200	17,000	1,300	800	300	700	1,300
Black, non-Hispanic.....	6,300	5,100	4,700	400	-	100	800	400
Hispanic.....	6,000	5,200	4,700	300	100	400	300	200
American Indian/Alaskan Native.....	800	800	700	100	-	100	-	-
Social and related scientists								
Women.....	210,600	181,100	122,700	57,000	1,300	2,400	7,300	19,900
White, non-Hispanic.....	181,900	156,200	104,500	50,600	1,100	2,000	6,900	16,800
Asian/Pacific Islander.....	7,400	6,100	4,600	1,500	100	-	200	1,100
Black, non-Hispanic.....	10,800	9,100	6,900	2,100	100	300	-	1,400
Hispanic.....	9,000	8,500	5,800	2,600	100	-	200	200
American Indian/Alaskan Native.....	1,200	1,200	1,000	200	-	-	-	-
Men.....	190,300	167,900	139,500	27,300	1,100	1,100	15,100	6,300
White, non-Hispanic.....	166,900	146,500	122,100	23,500	900	1,000	14,100	5,300
Asian/Pacific Islander.....	8,300	7,200	5,900	1,200	100	-	300	700
Black, non-Hispanic.....	8,200	7,500	6,200	1,200	-	-	600	100
Hispanic.....	6,100	5,900	4,500	1,200	100	-	100	100
American Indian/Alaskan Native.....	900	800	700	100	-	-	-	-
Engineers								
Women.....	143,600	123,700	111,400	12,000	300	3,100	2,600	14,100
White, non-Hispanic.....	112,300	94,800	84,500	10,100	200	2,400	2,400	12,600
Asian/Pacific Islander.....	17,500	15,800	14,600	1,200	-	600	200	900
Black, non-Hispanic.....	8,000	7,800	7,400	400	-	100	-	200
Hispanic.....	5,400	4,900	4,600	300	-	-	-	500
American Indian/Alaskan Native.....	400	400	400	-	-	-	-	-
Men.....	1,493,800	1,250,500	1,200,600	48,300	1,600	19,800	205,700	17,700
White, non-Hispanic.....	1,265,800	1,042,300	999,700	41,800	900	15,500	194,400	13,600
Asian/Pacific Islander.....	146,900	133,900	128,700	4,500	700	2,600	7,400	2,900
Black, non-Hispanic.....	30,300	27,700	26,700	900	-	900	1,200	500
Hispanic.....	46,700	42,800	41,600	1,100	-	800	2,500	600
American Indian/Alaskan Native.....	3,700	3,400	3,400	100	-	100	200	-

KEY: - = Fewer than 50 estimated.

NOTE: Figures are rounded to nearest hundred. Details may not add to total because of rounding. Total includes "other" race/ethnicity not shown separately.

The term "scientists and engineers" includes all persons who have ever received a bachelor's degree or higher in a science or engineering field, plus persons holding a non-science and -engineering bachelor's or higher degree who were employed in a science or engineering occupation.

SOURCE: National Science Foundation/Division of Science Resources Studies, 1997 SESTAT (Scientists and Engineers Statistical Data System).

**Appendix table 5-9. Scientists and engineers who are unemployed or out of the labor force,
by reason for not working, sex, race/ethnicity, and disability status: 1997**

Reason for not working	Total	Sex		Race/ethnicity					Disability status	
		Women	Men	White, non- Hispanic	Asian/ Pacific Islander	Black, non- Hispanic	Hispanic	Indian/ Alaskan Native	Persons without disabilities	Persons with disabilities
Total ¹	529,600	135,100	394,500	468,300	34,900	13,600	11,400	700	437,500	92,000
Family responsibilities...	59,200	51,900	7,300	51,700	4,000	1,000	2,100	-	56,100	3,100
Chronic illness or permanent disability...	27,800	8,200	19,600	24,300	1,800	1,300	400	-	10,200	17,600
Suitable job not available...	26,000	9,400	16,700	19,900	3,400	1,100	1,300	100	22,700	3,300
Did not need or want to work...	76,400	41,000	35,400	65,100	6,700	3,100	1,500	100	70,900	5,500
Other reason...	17,000	5,900	11,100	13,700	2,100	400	600	100	15,500	1,500
Retired...	342,600	31,100	311,500	319,900	12,600	5,400	4,300	300	271,300	71,300
Student...	61,000	25,000	36,000	41,700	11,300	4,600	3,200	200	58,800	2,200
On layoff from a job...	25,700	8,800	16,900	21,000	2,800	700	1,200	100	23,400	2,300
Percentage distribution										
Total ¹	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Family responsibilities...	11.2	38.4	1.8	11.0	11.5	7.7	18.5	3.3	12.8	3.4
Chronic illness or permanent disability...	5.3	6.1	5.0	5.2	5.2	9.7	3.3	0.5	2.3	19.2
Suitable job not available...	4.9	6.9	4.2	4.3	9.8	7.9	11.6	11.5	5.2	3.6
Did not need or want to work...	14.4	30.4	9.0	13.9	19.3	22.7	12.8	13.3	16.2	6.0
Other reason...	3.2	4.3	2.8	2.9	6.0	3.3	5.6	9.4	3.5	1.6
Retired...	64.7	23.0	79.0	68.3	36.2	39.7	38.1	41.6	62.0	77.5
Student...	11.5	18.5	9.1	8.9	32.2	34.0	28.2	27.7	13.4	2.4
On layoff from a job...	4.9	6.5	4.3	4.5	8.1	5.3	10.1	8.4	5.3	2.5

¹Because of rounding and because respondents could select more than one reason, details will not add to totals.

KEY: - = Fewer than 50 estimated.

NOTE: The term "scientists and engineers" includes all persons who have ever received a bachelor's degree or higher in a science or engineering field, plus persons holding a non-science and -engineering bachelor's or higher degree who were employed in a science or engineering occupation. Total includes "other" race/ethnicity not shown separately. Figures are rounded to nearest hundred. Percentages are calculated from unrounded numbers.

SOURCE: National Science Foundation/Division of Science Resources Studies, 1997 SESTAT (Scientists and Engineers Statistical Data System).

Appendix table 5-10. Part-time employed scientists and engineers, by preference for full-time employment and reason for working part time, sex, race/ethnicity, and disability status: 1997

Preference for full-time and reason for part-time	Total	Sex		Race/ethnicity					Disability status	
		Women	Men	White, non-Hispanic	Asian/Pacific Islander	Black, non-Hispanic	Hispanic	American Indian/Alaskan Native	Persons without disabilities	Persons with disabilities
Total.....	264,400	127,300	137,100	230,400	17,600	7,500	8,200	700	243,400	21,000
Preference for full-time										
Did not want full-time.....	232,500	115,300	117,200	205,300	14,000	5,400	7,300	500	215,100	17,400
Wanted full-time.....	31,900	12,000	19,900	25,000	3,600	2,100	1,000	200	28,300	3,600
Reason for part-time										
Family responsibilities.....	70,100	56,000	14,100	63,000	3,300	1,300	2,400	100	66,500	3,700
Chronic illness or permanent disability.....	5,600	3,300	2,300	5,100	200	-	200	100	2,800	2,800
Did not need or want to work full-time.....	116,300	63,000	53,300	103,600	5,900	2,500	3,900	300	109,000	7,300
Suitable full-time job not available.....	37,000	16,000	21,000	29,600	3,600	2,000	1,500	200	33,700	3,300
Other reason.....	19,100	9,200	10,000	16,200	1,800	800	300	-	17,300	1,800
Retired.....	57,900	6,600	51,300	54,000	1,800	800	1,300	100	48,100	9,800
Student.....	77,700	32,300	45,500	60,300	10,400	2,900	3,800	200	75,200	2,500

KEY: - = Fewer than 50 estimated.

NOTE: Figures are rounded to nearest hundred. Details will not add to total because of rounding and because respondents could select more than one reason. The term "scientists and engineers" includes all persons who have ever received a bachelor's degree or higher in a science or engineering field, plus persons holding a non-science and -engineering bachelor's or higher degree who were employed in a science or engineering occupation. Total includes "other" race/ethnicity not shown separately.

SOURCE: National Science Foundation/Division of Science Resources Studies, 1997 SESTAT (Scientists and Engineers Statistical Data System).

Appendix table 5-11. Employment status of scientists and engineers, by age and disability status: 1997

Age and disability status	Total	Employed				Unemployed/ seeking employment	Retired	Not employed/ not seeking employment
		Total	Full-time	Part-time	Postdoctoral appointment			
All ages								
Persons without disabilities...	3,620,900	3,183,300	2,917,200	242,500	23,500	47,700	264,000	125,900
Persons with disabilities...	278,000	186,000	164,300	21,000	700	5,200	70,300	16,400
Younger than 35								
Persons without disabilities...	1,028,100	957,600	865,600	79,400	12,500	12,400	900	57,200
Persons with disabilities...	21,600	19,600	17,800	1,600	200	500	-	1,500
35 to 44								
Persons without disabilities...	1,127,900	1,075,000	1,008,000	57,800	9,200	11,200	1,900	39,800
Persons with disabilities...	47,500	43,000	39,800	3,000	200	600	300	3,500
45 to 54								
Persons without disabilities...	791,100	758,800	716,800	40,700	1,200	9,300	3,900	19,100
Persons with disabilities...	81,000	74,100	69,500	4,500	100	1,900	900	4,100
55 or older								
Persons without disabilities...	673,500	391,700	326,500	64,600	600	14,700	257,200	9,800
Persons with disabilities...	127,800	49,200	37,300	11,800	100	2,200	69,100	7,300
Percentage distribution:								
All ages								
Persons without disabilities...	100.0	87.9	80.6	6.7	0.7	1.3	7.3	3.5
Persons with disabilities...	100.0	66.9	59.1	7.5	0.2	1.9	25.3	5.9
Younger than 35								
Persons without disabilities...	100.0	93.1	84.2	7.7	1.2	1.2	0.1	5.6
Persons with disabilities...	100.0	90.8	82.3	7.4	1.1	2.2	0.0	7.0
35 to 44								
Persons without disabilities...	100.0	95.3	89.4	5.1	0.8	1.0	0.2	3.5
Persons with disabilities...	100.0	90.6	83.9	6.3	0.4	1.3	0.7	7.4
45 to 54								
Persons without disabilities...	100.0	95.9	90.6	5.1	0.2	1.2	0.5	2.4
Persons with disabilities...	100.0	91.4	85.7	5.6	0.1	2.4	1.1	5.1
55 or older								
Persons without disabilities...	100.0	58.2	48.5	9.6	0.1	2.2	38.2	1.5
Persons with disabilities...	100.0	38.5	29.1	9.3	0.1	1.7	54.1	5.7

KEY: - = Fewer than 50 estimated.

NOTE: Figures are rounded to nearest hundred. Percentages are calculated from unrounded numbers. Details may not add to total because of rounding. The term "scientists and engineers" includes all persons who have ever received a bachelor's degree or higher in a science or engineering field, plus persons holding a non-science and engineering bachelor's or higher degree who were employed in a science or engineering occupation.

SOURCE: National Science Foundation/Division of Science Resources Studies, 1997 SESTAT (Scientists and Engineers Statistical Data System).

Appendix table 5-12. Employed scientists and engineers, by occupation, employment sector, sex, race/ethnicity, and disability status: 1997

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Occupation and employment sector	Total	Sex		Race/ethnicity				Disability status	
		Women	Men	White, non-Hispanic	Asian/ Pacific Islander	Black, non-Hispanic	Hispanic	American Indian/ Alaskan Native	Persons without disabilities
Scientists and engineers total...	3,369,300	763,300	2,606,000	2,791,700	349,800	113,000	103,500	9,900	3,105,400
Elementary, middle, or secondary school...	37,200	22,900	14,300	32,600	700	1,900	1,900	200	34,800
2-year college...	59,500	24,100	35,300	52,200	2,100	2,900	2,100	200	54,000
4-year college or university...	252,300	70,200	182,200	203,700	29,900	8,100	9,500	1,000	235,700
Medical school...	47,500	19,500	28,000	37,800	6,800	1,200	1,400	300	45,900
University research institute...	36,900	11,400	25,500	28,100	6,000	1,000	1,600	200	34,700
Other educational institution...	14,400	6,300	8,000	12,000	1,100	900	300	-	13,500
Combined 4-year, medical school, or research institute ¹ ...	138,800	49,300	89,600	116,400	13,800	3,800	4,600	100	127,100
Private-for-profit...	2,001,300	355,100	1,646,200	1,653,500	225,700	60,200	57,000	4,700	1,850,600
Private-not-for-profit...	107,000	47,200	59,800	91,200	7,600	3,800	3,500	800	100,300
Self-employed, not incorporated...	110,100	36,900	73,200	102,300	4,300	1,000	2,200	300	99,000
Self-employed, incorporated...	77,500	12,700	64,800	68,700	6,000	1,600	1,000	100	68,500
Local government...	68,200	18,600	49,600	49,600	11,100	2,900	4,100	400	61,600
State government...	120,300	30,300	90,000	96,200	10,900	8,300	3,800	600	107,100
U.S. Military...	23,200	2,800	20,300	18,900	2,200	900	1,100	100	22,500
U.S. Government...	227,400	47,600	179,800	188,600	17,900	12,300	7,600	800	205,900
Other non-educational institution...	47,700	8,300	39,300	39,900	3,700	2,100	1,700	200	44,300
Computer and mathematical scientists, total...	1,039,500	280,900	758,600	839,400	126,600	44,900	26,200	1,800	986,900
Elementary, middle, or secondary school...	4,500	1,500	2,900	3,500	200	400	500	-	4,500
2-year college...	24,200	10,000	14,200	20,700	1,200	1,400	900	-	22,900
4-year college or university...	38,500	9,300	29,200	29,600	6,200	1,400	1,200	200	36,100
Medical school...	2,700	1,000	1,700	1,900	400	200	200	-	2,600
University research institute...	4,100	1,300	2,700	2,800	1,100	-	200	-	3,900
Other educational institution...	4,300	1,600	2,700	3,900	400	-	-	-	3,900
Combined 4-year, medical school, or research institute ¹ ...	43,000	17,500	25,400	37,100	2,900	1,400	1,400	-	41,300
Private-for-profit...	727,500	185,500	541,900	580,900	98,800	29,400	17,300	1,200	692,900
Private-not-for-profit...	32,000	13,400	18,600	28,000	2,200	800	800	200	29,600
Self-employed, not incorporated...	25,100	5,400	19,700	22,600	1,800	300	300	100	24,000
Self-employed, incorporated...	29,300	4,300	25,000	25,800	2,700	500	300	-	26,800
Local government...	12,800	5,500	7,300	9,300	1,900	700	900	-	12,000
State government...	23,300	7,400	15,900	17,300	1,900	3,100	400	100	21,900
U.S. Military...	4,300	600	3,700	3,100	700	200	300	-	4,300
U.S. Government...	49,000	12,800	36,100	40,900	2,900	4,000	1,200	-	45,700
Other non-educational institution...	15,100	3,700	11,400	12,000	1,200	1,200	600	100	14,600
									500

See explanatory information and SOURCE at end of table.

Appendix table 5-12. Employed scientists and engineers, by occupation, employment sector, sex, race/ethnicity, and disability status: 1997

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Occupation and employment sector	Total	Sex		Race/ethnicity					Disability status	
		Women	Men	White, non-Hispanic	Asian/ Pacific Islander	Black, non-Hispanic	Hispanic	American Indian/ Alaskan Native	Persons without disabilities	Persons with disabilities
Life and related scientists, total...	321,800	115,900	205,900	272,400	32,300	7,700	8,000	1,400	303,100	18,700
Elementary, middle, or secondary school...	700	500	100	500	-	-	100	-	500	100
2-year college...	12,500	6,500	6,000	11,500	200	200	600	100	11,200	1,400
4-year college or university...	52,400	17,600	34,800	44,500	5,100	1,200	1,400	200	49,500	2,900
Medical school...	32,700	12,500	20,200	25,900	5,000	700	800	300	31,700	1,000
University research institute...	9,700	3,800	6,000	7,500	1,400	100	700	-	8,900	900
Other educational institution...	2,200	500	1,700	1,900	300	-	-	-	2,200	-
Combined 4-year, medical school, or research institute ¹ ...	44,300	18,900	25,500	36,100	6,000	900	1,300	-	41,300	3,100
Private-for-profit...	76,400	27,100	49,300	64,200	8,500	2,400	1,200	100	71,700	4,700
Private-not-for-profit...	13,300	6,300	6,900	11,400	1,400	200	200	-	12,600	600
Self-employed, not incorporated...	8,000	2,100	5,900	7,800	100	-	-	-	7,700	300
Self-employed, incorporated...	3,700	700	2,900	3,500	100	-	-	-	3,400	200
Local government...	6,700	2,400	4,300	4,500	1,000	400	500	200	6,500	200
State government...	20,000	6,400	13,600	18,700	600	200	300	300	18,500	1,500
U.S. Military...	2,000	700	1,300	1,800	200	-	100	-	2,000	-
U.S. Government...	35,900	9,600	26,400	31,300	2,300	1,300	800	200	34,100	1,800
Other non-educational institution...	1,300	400	900	1,200	100	-	-	-	1,300	-
Physical and related scientists, total...	284,900	61,800	223,100	240,200	27,900	8,400	7,200	900	269,200	15,700
Elementary, middle, or secondary school...	800	200	600	600	200	-	-	-	800	-
2-year college...	7,300	2,400	5,000	6,700	300	200	100	100	6,100	1,300
4-year college or university...	45,600	9,100	36,500	38,200	4,800	900	1,500	200	43,500	2,100
Medical school...	2,000	400	1,600	1,300	500	-	100	-	1,900	100
University research institute...	8,900	1,600	7,300	7,100	1,200	400	200	100	8,600	300
Other educational institution...	700	300	400	700	-	-	-	-	600	100
Combined 4-year, medical school, or research institute ¹ ...	14,600	2,800	11,800	12,900	1,200	100	500	-	12,100	2,400
Private-for-profit...	137,100	30,700	106,400	114,300	14,900	4,100	3,400	400	131,100	6,000
Private-not-for-profit...	5,100	1,300	3,800	4,200	700	-	200	-	4,900	200
Self-employed, not incorporated...	6,200	400	5,800	5,700	300	-	100	-	5,900	300
Self-employed, incorporated...	4,400	500	3,900	4,100	200	100	-	-	4,300	100
Local government...	5,300	1,500	3,800	3,900	800	400	-	100	5,100	200
State government...	12,900	2,900	10,000	10,800	900	800	300	-	12,100	800
U.S. Military...	2,600	400	2,200	2,300	-	200	100	-	2,600	-
U.S. Government...	27,900	6,800	21,100	23,900	1,900	1,200	800	-	26,100	1,800
Other non-educational institution...	3,300	300	3,000	3,300	100	-	-	-	3,300	-

See explanatory information and SOURCE at end of table.

Appendix table 5-12. Employed scientists and engineers, by occupation, employment sector, sex, race/ethnicity, and disability status: 1997

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Occupation and employment sector	Total	Sex		Race/ethnicity					Disability status	
		Women	Men	White, non-Hispanic	Asian/ Pacific Islander	Black, non-Hispanic	Hispanic	American Indian/ Alaskan Native	Persons without disabilities	Persons with disabilities
Social and related scientists, total...	349,000	181,100	167,900	302,600	13,300	16,500	14,400	2,000	327,800	21,200
Elementary, middle, or secondary school...	30,300	20,700	9,600	27,200	200	1,500	1,300	200	28,100	2,200
2-year college...	10,000	4,800	5,200	8,400	100	900	500	100	9,200	800
4-year college or university...	76,900	29,900	47,000	64,300	5,000	3,300	3,900	400	72,000	4,900
Medical school...	8,200	5,300	3,000	7,300	300	300	300	-	7,900	300
University research institute...	6,600	3,800	2,800	5,400	500	300	200	100	6,300	300
Other educational institution...	6,100	3,800	2,300	5,000	200	700	200	-	5,700	400
Combined 4-year, medical school, or research institute ¹ ...	19,000	8,900	10,100	15,300	1,600	900	1,100	100	16,800	2,200
Private-for-profit...	53,300	26,900	26,300	47,800	2,200	1,300	1,900	100	51,300	2,000
Private-not-for-profit...	39,400	25,300	14,100	33,300	1,000	2,700	1,900	600	37,000	2,400
Self-employed, not incorporated...	41,700	27,200	14,500	40,100	300	600	500	200	39,400	2,400
Self-employed, incorporated...	10,500	4,900	5,600	10,000	100	300	-	-	9,800	700
Local government...	8,000	5,400	2,600	6,800	100	300	800	-	7,200	800
State government...	17,000	6,800	10,100	13,200	700	2,300	700	100	15,700	1,200
U.S. Military...	1,100	400	700	900	-	-	200	-	1,100	-
U.S. Government...	16,800	5,900	10,900	14,900	500	900	400	100	16,000	800
Other non-educational institution...	4,200	1,100	3,100	2,800	600	400	500	-	4,200	-
Engineers, total...	1,374,200	123,700	1,250,500	1,137,200	149,700	35,400	47,700	3,800	1,218,500	77,900
Elementary, middle, or secondary school...	900	-	900	800	100	-	-	-	900	-
2-year college...	5,400	500	4,900	4,900	200	100	100	-	4,600	400
4-year college or university...	39,000	4,300	34,700	27,100	8,800	1,400	1,600	100	34,600	2,200
Medical school...	1,900	300	1,600	1,300	500	-	-	-	1,800	-
University research institute...	7,700	900	6,700	5,300	1,800	200	400	-	7,000	300
Other educational institution...	1,000	-	1,000	500	200	200	100	-	1,000	-
Combined 4-year, medical school, or research institute ¹ ...	18,000	1,200	16,800	15,000	2,200	500	300	-	15,600	1,200
Private-for-profit...	1,007,100	84,800	922,200	846,300	101,400	23,000	33,300	2,900	903,500	51,800
Private-not-for-profit...	17,200	800	16,400	14,300	2,300	200	400	100	16,100	500
Self-employed, not incorporated...	29,100	1,800	27,300	26,100	1,800	-	1,200	100	22,000	3,500
Self-employed, incorporated...	29,700	2,300	27,400	25,300	2,900	700	700	-	24,200	2,800
Local government...	35,500	3,800	31,700	25,100	7,300	1,200	1,900	-	30,800	2,400
State government...	47,200	6,800	40,400	36,200	6,900	1,800	2,200	100	39,000	4,100
U.S. Military...	13,200	800	12,400	10,800	1,200	600	400	100	12,500	300
U.S. Government...	97,800	12,500	85,300	77,500	10,300	4,900	4,500	500	83,900	6,900
Other non-educational institution...	23,700	2,800	20,900	20,700	1,800	600	600	100	20,800	1,400

See explanatory information and SOURCE at end of table.

Appendix table 5-12. Employed scientists and engineers, by occupation, employment sector, sex, race/ethnicity, and disability status: 1997

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¹ Data from the National Survey of College Graduates available only in the combined category due to reasons of confidentiality.

KEY: - = Fewer than 50 estimated.

NOTE: Figures are rounded to nearest hundred. Details may not add to total because of rounding. Total includes "other" race/ethnicity not shown separately. The term "scientists and engineers" includes all persons who have ever received a bachelor's degree or higher in a science or engineering field, plus persons holding a non-science and -engineering bachelor's or higher degree who were employed in a science or engineering occupation.

SOURCE: National Science Foundation/Division of Science Resources Studies, 1997 SESTAT (Scientists and Engineers Statistical Data System).

Women, Minorities, and Persons With Disabilities in Science and Engineering: 2000

Appendix table 5-13. Scientists and engineers employed in academic institutions, by institutional type, highest degree, sex, race/ethnicity, and disability status: 1997

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Highest degree and type of institution	Total	Sex		Race/ethnicity					Disability status	
		Women	Men	White, non-Hispanic	Asian/Pacific Islander	Black, non-Hispanic	Hispanic	American Indian/Alaskan Native	Persons without disabilities	Persons with disabilities
All degrees.....	586,600	203,700	382,800	482,800	60,400	19,800	21,400	1,900	549,900	36,700
Primary school.....	19,800	13,300	6,500	17,400	200	1,000	1,100	100	18,800	1,000
Secondary school.....	17,400	9,600	7,800	15,200	500	900	800	100	16,000	1,400
2-year college.....	59,500	24,100	35,300	52,200	2,100	2,900	2,100	200	54,400	5,100
4-year college or university.....	252,300	70,200	182,200	203,700	29,900	8,100	9,500	1,000	237,900	14,400
Medical school.....	47,500	19,500	28,000	37,800	6,800	1,200	1,400	300	46,000	1,500
Research institute.....	36,900	11,400	25,500	28,100	6,000	1,000	1,600	200	35,000	1,900
Other.....	14,400	6,300	8,000	12,000	1,100	900	300	-	13,500	900
Combined 4-year, medical school, or research institute.....	138,800	49,300	89,600	116,400	13,800	3,800	4,600	100	128,300	10,500
Bachelor's.....	155,800	63,800	92,000	129,400	13,100	5,000	7,700	700	148,200	7,600
Primary school.....	3,400	1,900	1,500	2,800	100	300	200	-	3,400	-
Secondary school.....	4,000	1,800	2,200	3,500	200	100	200	100	3,900	100
2-year college.....	13,900	5,800	8,100	12,400	500	800	300	-	13,200	700
4-year college or university.....	65,800	26,200	39,500	53,100	6,100	2,100	4,100	400	64,000	1,800
Medical school.....	9,000	5,200	3,800	7,700	500	300	300	200	8,600	400
Research institute.....	11,400	4,400	6,900	9,300	1,100	400	600	-	10,600	700
Other.....	3,700	1,300	2,400	2,400	500	500	300	-	3,500	200
Combined 4-year, medical school, or research institute.....	44,600	17,100	27,500	38,300	4,100	600	1,700	-	40,800	3,800
Master's.....	182,500	76,400	106,100	149,400	17,600	8,300	6,400	500	170,700	11,800
Primary school.....	13,900	9,600	4,400	12,400	-	700	800	100	13,100	800
Secondary school.....	10,800	6,700	4,100	9,500	200	700	400	-	9,600	1,200
2-year college.....	36,600	15,200	21,400	32,100	900	1,800	1,700	200	33,000	3,600
4-year college or university.....	43,700	13,500	30,200	32,000	7,900	1,900	1,600	200	41,400	2,300
Medical school.....	4,800	2,600	2,200	3,200	1,200	300	100	100	4,800	-
Research institute.....	7,800	3,000	4,700	4,600	2,400	400	400	-	7,600	100
Other.....	7,900	3,800	4,000	7,500	200	200	-	-	7,700	200
Combined 4-year, medical school, or research institute.....	57,100	21,900	35,100	48,200	4,800	2,400	1,400	-	53,500	3,600

See explanatory information and SOURCE at end of table.

Appendix table 5-13. Scientists and engineers employed in academic institutions, by institutional type, highest degree, sex, race/ethnicity, and disability status: 1997

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Highest degree and type of institution	Total	Sex		Race/ethnicity					Disability status	
		Women	Men	White, non-Hispanic	Asian/Pacific Islander	Black, non-Hispanic	Hispanic	American Indian/Alaskan Native	Persons without disabilities	Persons with disabilities
Doctorate.....	235,500	60,500	175,000	192,500	28,900	6,300	6,900	800	219,900	15,600
Primary school.....	1,700	1,100	600	1,500	100	100	100	-	1,600	100
Secondary school.....	2,300	900	1,400	2,000	100	-	200	-	2,200	100
2-year college.....	8,200	3,200	5,100	7,000	700	300	100	-	7,600	600
4-year college or university.....	142,800	30,300	112,500	118,500	15,900	4,100	3,800	400	132,400	10,400
Medical school.....	33,200	11,500	21,700	26,500	5,000	600	1,000	100	32,100	1,100
Research institute.....	17,700	3,900	13,800	14,200	2,500	300	600	100	16,700	1,000
Other.....	2,500	1,100	1,400	1,800	400	200	-	-	2,100	400
Combined 4-year, medical school, or research institute.....	27,000	8,400	18,600	21,100	4,200	600	1,000	100	25,200	1,800

KEY: - = Fewer than 50 estimated.

NOTE: Figures are rounded to nearest hundred. Details may not add to total because of rounding. Total includes "professional and other degrees" and "other" race/ethnicity not shown separately. The term "scientists and engineers" includes all persons who have ever received a bachelor's degree or higher in a science or engineering field, plus persons holding a non-science and -engineering bachelor's or higher degree who were employed in a science or engineering occupation.

SOURCE: National Science Foundation/Division of Science Resources Studies, 1997 SESTAT (Scientists and Engineers Statistical Data System).

Women, Minorities, and Persons With Disabilities in Science and Engineering: 2000

**Appendix table 5-14. Science and engineering Ph.D. faculty employed full time in academic institutions,
by Carnegie classification of academic institution, sex, and race/ethnicity: 1995**

Carnegie classification	Total	Sex		Race/ethnicity					Disability status	
		Women	Men	White, non- Hispanic	Asian/ Pacific Islander	Black, non- Hispanic	Hispanic	American Indian/ Alaskan Native	Persons without disabilities	Persons with disabilities
Number										
Total...	174,600	36,600	138,000	149,400	15,100	4,700	4,600	800	164,900	9,700
Research University I...	64,100	12,500	51,600	55,100	6,000	1,300	1,500	200	61,200	2,900
Research University II...	15,500	2,700	12,700	13,300	1,500	200	400	100	14,400	1,100
Doctorate Granting I...	9,800	1,900	7,900	8,200	900	400	200	100	9,100	700
Doctorate Granting II...	11,900	2,100	9,800	10,100	1,100	300	400	-	11,100	800
Comprehensive I...	33,600	7,400	26,100	28,000	2,900	1,500	1,000	200	31,300	2,200
Comprehensive II...	2,700	700	2,100	2,400	200	100	100	-	2,600	100
Liberal Arts...	14,800	3,600	11,200	13,300	800	400	200	-	13,900	900
Two-Year Institutions...	4,200	1,100	3,100	3,600	300	200	100	-	4,000	200
Medical schools and medical centers...	8,700	2,700	6,000	7,600	600	200	300	100	8,200	400
Other specialized institutions...	2,800	500	2,300	2,400	300	-	100	-	2,700	100
Missing...	6,500	1,300	5,300	5,400	700	100	200	-	6,300	300
Percent ¹										
Total...	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Research University I...	38.1	35.4	38.9	38.3	41.7	28.3	34.1	25.0	38.6	30.9
Research University II...	9.2	7.6	9.6	9.2	10.4	4.3	9.1	12.5	9.1	11.7
Doctorate Granting I...	5.8	5.4	6.0	5.7	6.3	8.7	4.5	12.5	5.7	7.4
Doctorate Granting II...	7.1	5.9	7.4	7.0	7.6	6.5	9.1	*	7.0	8.5
Comprehensive I...	20.0	21.0	19.7	19.4	20.1	32.6	22.7	25.0	19.7	23.4
Comprehensive II...	1.6	2.0	1.6	1.7	1.4	2.2	2.3	*	1.6	1.1
Liberal Arts...	8.8	10.2	8.4	9.2	5.6	8.7	4.5	*	8.8	9.6
Two-Year Institutions...	2.5	3.1	2.3	2.5	2.1	4.3	2.3	*	2.5	2.1
Medical schools and medical centers...	5.2	7.6	4.5	5.3	4.2	4.3	6.8	12.5	5.2	4.3
Other specialized institutions...	1.7	1.4	1.7	1.7	2.1	*	2.3	*	1.7	1.1

¹ Percentages based on cases where Carnegie classification is known.

KEY: - = Fewer than 50 estimated.
* = Cannot be calculated.

NOTE: Figures are rounded to nearest hundred. Percentages are calculated from unrounded numbers. Details may not add to total because of rounding. The term "scientists and engineers" includes all persons who have ever received a bachelor's degree or higher in a science or engineering field, plus persons holding a non-science and -engineering bachelor's or higher degree who were employed in a science or engineering occupation.

SOURCE: National Science Foundation/Division of Science Resources Studies, 1995 SESTAT (Scientists and Engineers Statistical Data System).

**Appendix table 5-15. Full-time ranked doctoral scientists and engineers at 4-year colleges and universities,
by rank, years since doctorate, sex, race/ethnicity, and disability status: 1997**

Years since doctorate and rank	Total	Sex		Race/ethnicity				Disability status	
		Women	Men	White, non- Hispanic	Asian/ Pacific Islander	Black, non- Hispanic	Hispanic	American Indian/ Alaskan Native	Persons without disabilities
Total...	143,200	27,900	115,300	120,600	14,100	3,800	4,000	500	132,900
Professor...	65,100	6,800	58,300	57,200	5,200	1,200	1,300	300	58,900
Associate professor...	41,600	9,100	32,500	35,000	3,700	1,300	1,400	200	38,700
Assistant professor...	36,500	12,000	24,500	28,400	5,200	1,300	1,400	100	35,400
Less than 10	43,400	13,100	30,300	33,100	6,700	1,600	1,800	100	42,100
Professor...	1,400	400	1,100	900	500	100	-	-	1,400
Associate professor...	11,600	2,800	8,900	9,000	1,600	400	600	-	11,200
Assistant professor...	30,400	10,000	20,400	23,200	4,700	1,100	1,200	100	29,500
10 to 19	42,600	9,200	33,500	36,400	3,700	1,100	1,300	100	39,800
Professor...	17,200	2,500	14,600	14,600	1,700	400	500	-	15,700
Associate professor...	20,500	4,900	15,600	17,600	1,600	600	700	100	19,300
Assistant professor...	4,900	1,700	3,200	4,100	500	200	100	-	4,800
20 to 29	41,700	4,900	36,700	37,200	2,500	900	800	200	37,600
Professor...	32,900	3,400	29,500	29,400	2,100	600	600	200	30,000
Associate professor...	7,700	1,300	6,500	6,900	300	300	200	-	6,700
Assistant professor...	1,000	300	700	800	100	-	-	-	900
30 or more	15,500	700	14,800	14,000	1,200	100	100	100	13,400
Professor...	13,600	500	13,100	12,300	1,000	100	100	100	11,800
Associate professor...	1,700	200	1,500	1,600	100	-	-	-	1,500
Assistant professor...	100	-	100	100	-	-	-	-	100

KEY: - = Fewer than 50 estimated.

NOTE: Figures are rounded to nearest hundred. Details may not add to total because of rounding. Total includes "other" race/ethnicity not shown separately. The term "scientists and engineers" includes all persons who have ever received a bachelor's degree or higher in a science or engineering field, plus persons holding a non-science and -engineering bachelor's or higher degree who were employed in a science or engineering occupation.

SOURCE: National Science Foundation/Division of Science Resources Studies, 1997 SESTAT (Scientists and Engineers Statistical Data System).

Women, Minorities, and Persons With Disabilities in Science and Engineering: 2000

**Appendix table 5-16. Full-time doctoral scientists and engineers at 4-year colleges and universities,
by tenure status, years since doctorate, sex, race/ethnicity, and disability status: 1997**

Years since doctorate and tenure	Total	Sex		Race/ethnicity				Disability status	
		Women	Men	White, non-Hispanic	Asian/Pacific Islander	Black, non-Hispanic	Hispanic	American Indian/Alaskan Native	Persons without disabilities
Total...	179,200	39,800	139,400	147,500	21,400	4,600	5,000	600	167,600
Tenured...	97,300	13,900	83,400	84,400	8,000	2,100	2,400	400	88,500
On tenure track, not tenured...	30,700	9,500	21,200	23,700	4,200	1,300	1,400	100	29,800
Not on tenure track...	19,300	6,300	13,000	14,700	3,600	300	600	-	18,600
No tenure system at institution/ for my position...	31,900	10,100	21,800	24,700	5,600	800	800	100	30,700
Less than 10...	69,400	22,500	46,900	51,100	13,200	2,200	2,600	200	67,400
Tenured...	10,900	2,600	8,300	8,400	1,700	300	400	-	10,400
On tenure track, not tenured...	24,900	7,900	17,100	18,800	3,700	1,100	1,200	100	24,200
Not on tenure track...	12,700	4,400	8,300	9,100	3,000	300	400	-	12,400
No tenure system at institution/ for my position...	20,800	7,600	13,200	14,800	4,800	600	600	-	20,300
10 to 19...	48,500	10,800	37,800	41,300	4,400	1,300	1,400	100	45,300
Tenured...	33,500	6,300	27,200	28,600	2,900	900	1,000	100	30,900
On tenure track, not tenured...	4,800	1,500	3,300	4,000	400	200	100	-	4,700
Not on tenure track...	4,100	1,300	2,800	3,500	400	100	200	-	3,900
No tenure system at institution/ for my position...	6,200	1,700	4,500	5,300	600	200	100	-	5,800
20 to 29...	45,000	5,800	39,200	40,300	2,700	900	900	200	40,800
Tenured...	38,400	4,400	34,000	34,300	2,300	800	800	200	34,600
On tenure track, not tenured...	900	200	700	800	-	-	-	-	800
Not on tenure track...	1,900	500	1,400	1,700	200	-	-	-	1,800
No tenure system at institution/ for my position...	3,800	700	3,000	3,600	100	-	-	-	3,500
30 or more...	16,300	800	15,500	14,800	1,200	100	100	100	14,200
Tenured...	14,500	600	13,900	13,200	1,100	100	100	100	12,600
On tenure track, not tenured...	100	-	100	100	-	-	-	-	100
Not on tenure track...	500	100	400	500	-	-	-	-	400
No tenure system at institution/ for my position...	1,200	100	1,000	1,000	100	-	-	-	1,000

KEY: - = Fewer than 50 estimated.

NOTE: Figures are rounded to nearest hundred. Details may not add to total because of rounding. Total includes "other" race/ethnicity not shown separately. The term "scientists and engineers" includes all persons who have ever received a bachelor's degree or higher in a science or engineering field, plus persons holding a non-science and -engineering bachelor's or higher degree who were employed in a science or engineering occupation.

SOURCE: National Science Foundation/Division of Science Resources Studies, 1997 SESTAT (Scientists and Engineers Statistical Data System).

Appendix table 5-17. Percentage of full-time ranked doctoral scientists and engineers employed in 4-year colleges or universities who are supported by Federal grants or contracts, by occupation, sex, race/ethnicity, and disability status: 1997

Occupation	Total	Sex		Race/ethnicity					Disability status	
		Women	Men	White, non-Hispanic	Asian/Pacific Islander	Black, non-Hispanic	Hispanic	American Indian/Alaskan Native	Persons without disabilities	Persons with disabilities
Total science and engineering.....	37.2	34.1	37.9	36.9	42.4	28.8	36.9	22.5	37.8	29.3
Computer/mathematical sciences.....	23.7	25.2	23.5	22.3	29.8	22.4	28.0	13.8	24.8	10.1
Life and related sciences.....	55.1	55.2	55.1	54.8	59.3	34.2	67.8	37.7	55.8	46.2
Physical and related sciences.....	43.3	36.6	44.2	43.3	37.5	50.6	50.9	34.1	44.0	31.1
Social and related sciences.....	17.3	19.7	16.3	17.7	13.1	20.6	11.5	11.5	17.3	18.3
Engineering.....	50.6	45.5	50.9	48.6	61.2	41.2	43.2	34.2	51.4	39.4

NOTE: The term "scientists and engineers" includes all persons who have ever received a bachelor's degree or higher in a science or engineering field, plus persons holding a non-science and -engineering bachelor's or higher degree who were employed in a science or engineering occupation. Total includes "other" race/ethnicity not shown separately.

SOURCE: National Science Foundation/Division of Science Resources Studies, 1997 SESTAT (Scientists and Engineers Statistical Data System).

Women, Minorities, and Persons With Disabilities in Science and Engineering: 2000

Appendix table 5-18. Full-time doctoral scientists and engineers in 4-year colleges or universities, by academic rank, sex, and race/ethnicity: 1997

Sex and rank	Total	White, non- Hispanic	Asian/ Pacific Islander	Black, non- Hispanic	Hispanic	American Indian/ Alaskan Native
Both sexes						
Total...	179,100	147,400	21,400	4,600	5,000	600
Professor...	65,100	57,200	5,200	1,200	1,300	300
Associate professor...	41,600	35,000	3,700	1,300	1,400	200
Assistant professor...	36,400	28,300	5,200	1,300	1,400	100
Instructor...	2,700	1,800	600	100	100	-
Lecturer...	2,200	1,900	200	-	100	-
Adjunct faculty...	2,900	2,500	300	-	100	-
Other...	200	100	-	-	-	-
Not applicable at this institution/ for my position...	28,100	20,400	6,200	600	800	-
Women						
Total...	39,800	32,200	4,600	1,400	1,400	100
Professor...	6,800	6,100	500	100	100	-
Associate professor...	9,100	7,800	500	400	400	-
Assistant professor...	12,000	9,500	1,300	600	500	-
Instructor...	1,200	1,000	100	-	-	-
Lecturer...	900	800	100	-	-	-
Adjunct faculty...	1,000	900	100	-	-	-
Other...	100	100	-	-	-	-
Not applicable at this institution/ for my position...	8,800	6,200	2,000	300	300	-
Men						
Total...	139,400	115,200	16,800	3,200	3,700	500
Professor...	58,300	51,100	4,700	1,000	1,200	300
Associate professor...	32,500	27,200	3,200	1,000	1,000	100
Assistant professor...	24,400	18,800	3,900	700	900	100
Instructor...	1,500	900	500	100	100	-
Lecturer...	1,300	1,100	100	-	-	-
Adjunct faculty...	1,900	1,700	200	-	-	-
Other...	100	100	-	-	-	-
Not applicable at this institution/ for my position...	19,300	14,300	4,200	400	500	-

KEY: - = Fewer than 50 estimated.

NOTE: Figures are rounded to nearest hundred. Details may not add to total because of rounding. Total includes "other" race/ethnicity not shown separately. The term "scientists and engineers" includes all persons who have ever received a bachelor's degree or higher in a science or engineering field, plus persons holding a non-science and -engineering bachelor's or higher degree who were employed in a science or engineering occupation.

SOURCE: National Science Foundation/Division of Science Resources Studies, 1997 SESTAT (Scientists and Engineers Statistical Data System).

Appendix table 5-19. Full-time doctoral scientists and engineers in 4-year colleges or universities, by sex, race/ethnicity, and tenure: 1997

Sex and rank	Total	White, non- Hispanic	Asian/ Pacific Islander	Black, non- Hispanic	Hispanic	American Indian/ Alaskan Native
Both sexes						
Total...	179,100	147,400	21,400	4,600	5,000	600
Tenured...	97,300	84,400	8,000	2,100	2,400	400
On tenure track but not tenured...	30,700	23,700	4,200	1,300	1,400	100
Not on tenure track...	19,300	14,700	3,600	300	600	-
No tenure system at this institution/ for my position...	31,900	24,600	5,600	800	800	100
Women						
Total...	39,800	32,200	4,600	1,400	1,400	100
Tenured...	13,900	12,200	800	400	400	-
On tenure track but not tenured...	9,500	7,500	1,000	500	400	-
Not on tenure track...	6,300	4,900	1,000	100	200	-
No tenure system at this institution/for my position...	10,100	7,600	1,800	400	300	-
Men						
Total...	139,400	115,200	16,800	3,200	3,700	500
Tenured...	83,400	72,200	7,200	1,700	1,900	400
On tenure track but not tenured...	21,100	16,100	3,200	800	900	100
Not on tenure track...	13,000	9,800	2,700	200	300	-
No tenure system at this institution/for my position...	21,800	17,000	3,800	400	500	-

KEY: - = Fewer than 50 estimated.

NOTE: Figures are rounded to nearest hundred. Details may not add to total because of rounding. Total includes "other" race/ethnicity not shown separately. The term "scientists and engineers" includes all persons who have ever received a bachelor's degree or higher in a science or engineering field, plus persons holding a non-science and -engineering bachelor's or higher degree who were employed in a science or engineering occupation.

SOURCE: National Science Foundation/Division of Science Resources Studies, 1997 SESTAT (Scientists and Engineers Statistical Data System).

Women, Minorities, and Persons With Disabilities in Science and Engineering: 2000

Appendix table 5-20. Scientists and engineers employed in business or industry, by primary or secondary work activity, age, sex, race/ethnicity, and disability status: 1997

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Primary or secondary work activity and age	Total	Sex		Race/ethnicity					Disability status	
		Women	Men	White, non-Hispanic	Asian/Pacific Islander	Black, non-Hispanic	Hispanic	American Indian/Alaskan Native	Persons without disabilities	Persons with disabilities
Total...	2,343,600	460,200	1,883,400	1,955,600	247,400	68,700	65,500	6,100	2,222,600	121,000
Research and development...	1,299,200	209,300	1,089,900	1,077,400	150,700	34,700	33,400	2,800	1,235,300	63,900
Teaching...	62,000	21,700	40,300	53,500	3,200	3,100	2,000	200	57,900	4,100
Management/administration...	1,080,500	200,100	880,400	926,300	91,400	28,000	31,900	2,800	1,027,400	53,100
Computer applications...	987,600	210,300	777,300	793,100	129,600	35,600	26,400	2,900	940,300	47,200
Other...	443,600	114,000	329,500	387,800	28,900	12,000	12,900	2,000	415,700	27,900
Younger than age 35...	695,400	164,500	531,000	546,300	95,600	26,900	24,400	2,200	682,200	13,200
Research and development...	396,200	84,800	311,400	308,800	57,600	15,100	13,700	1,000	387,800	8,400
Teaching...	14,800	6,100	8,700	11,500	1,400	1,100	800	-	14,700	100
Management/administration...	314,000	75,800	238,200	255,300	35,100	10,800	11,900	900	307,700	6,300
Computer applications...	327,800	74,300	253,500	246,700	55,900	14,300	9,500	1,400	322,300	5,500
Other...	91,900	29,600	62,300	75,100	8,500	3,300	4,400	600	90,500	1,300
Age 35 to 44...	827,100	171,500	655,600	695,000	79,500	26,100	24,600	1,700	794,500	32,600
Research and development...	468,500	77,800	390,700	392,900	49,200	12,900	12,300	900	451,500	17,000
Teaching...	16,700	4,900	11,800	13,700	1,000	1,300	600	100	15,700	1,100
Management/administration...	381,400	76,600	304,800	331,700	26,200	11,000	11,900	700	366,000	15,500
Computer applications...	378,300	85,000	293,300	308,100	45,000	13,200	11,200	800	362,800	15,500
Other...	138,200	36,800	101,400	120,400	9,300	4,000	3,800	700	132,400	5,800
Age 45 to 54...	544,500	93,800	450,700	467,800	52,800	12,200	10,800	1,000	496,300	48,300
Research and development...	281,700	35,600	246,100	240,700	31,700	4,700	4,300	200	258,000	23,800
Teaching...	19,300	8,200	11,000	17,200	700	700	600	-	17,400	1,800
Management/administration...	263,400	39,100	224,300	231,600	21,100	4,700	5,300	700	241,800	21,600
Computer applications...	211,500	41,400	170,100	177,800	22,700	6,500	4,300	300	191,000	20,500
Other...	130,700	31,600	99,000	116,600	6,800	3,700	3,100	500	119,500	11,200

See explanatory information and SOURCE at end of table.

Appendix table 5-20. Scientists and engineers employed in business or industry, by primary or secondary work activity, age, sex, race/ethnicity, and disability status: 1997

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Primary or secondary work activity and age	Total	Sex		Race/ethnicity					Disability status	
		Women	Men	White, non-Hispanic	Asian/Pacific Islander	Black, non-Hispanic	Hispanic	American Indian/Alaskan Native	Persons without disabilities	Persons with disabilities
Age 55 or older...	276,200	30,300	245,900	246,400	19,400	3,500	5,800	1,100	249,300	26,900
Research and development...	152,500	11,000	141,500	134,800	12,000	2,000	3,100	700	137,700	14,800
Teaching...	11,200	2,500	8,800	11,100	100	-	-	100	10,100	1,100
Management/administration...	121,600	8,600	113,000	107,700	9,000	1,500	2,800	600	111,900	9,700
Computer applications...	69,800	9,600	60,200	60,400	5,900	1,600	1,400	500	64,000	5,800
Other...	82,800	15,900	66,900	75,700	4,300	1,100	1,600	200	73,300	9,500

KEY: - = Fewer than 50 estimated.

NOTE: Figures are rounded to nearest hundred. Details will not add to total because of rounding. Sum of primary/secondary work activity categories exceeds total because of multiple response. The term "scientists and engineers" includes all persons who have ever received a bachelor's degree or higher in a science or engineering field, plus persons holding a non-science and -engineering bachelor's or higher degree who were employed in a science or engineering occupation. Total includes "other" race/ethnicity not shown separately.

SOURCE: National Science Foundation/Division of Science Resources Studies, 1997 SESTAT (Scientists and Engineers Statistical Data System).

Women, Minorities, and Persons With Disabilities in Science and Engineering: 2000

Appendix table 5-21. Median number of direct and indirect subordinates for supervisory and managerial scientists and engineers employed in business or industry, by age, sex, race/ethnicity, and disability status: 1997

Sex, race/ethnicity, and disability status	Age				
	Total	Younger than 35	35-44	45-54	55 or older
Total.....	10	6	10	13	13
Sex					
Women.....	7	5	7	8	10
Men.....	10	6	10	14	13
Race/ethnicity					
White, non-Hispanic.....	10	6	10	14	14
Asian/Pacific Islander.....	5	5	6	5	8
Black, non-Hispanic.....	12	7	14	15	20
Hispanic.....	10	6	13	10	24
American Indian/Alaskan Native.....	5	3	5	10	10
Disability status					
Persons without disabilities.....	10	6	10	13	13
Persons with disabilities.....	11	6	8	13	14

NOTE: The term "scientists and engineers" includes all persons who have ever received a bachelor's degree or higher in a science or engineering field, plus persons holding a non-science and -engineering bachelor's or higher degree who were employed in a science or engineering occupation. Total includes "other" race/ethnicity not shown separately.

SOURCE: National Science Foundation/Division of Science Resources Studies, 1997 SESTAT (Scientists and Engineers Statistical Data System).

Appendix table 5-22. Scientists and engineers employed in government, by primary or secondary work activity—management, age, sex, race/ethnicity, and disability status: 1997

Primary or secondary work activity and age	Total	Sex		Race/ethnicity				Disability status	
		Women	Men	White, non-Hispanic	Asian/Pacific Islander	Black, non-Hispanic	Hispanic	American Indian/Alaskan Native	Persons without disabilities
Total...	439,100	99,400	339,800	353,300	42,000	24,500	16,500	1,800	410,800
Other...	211,900	53,500	158,400	168,900	23,500	10,500	7,400	1,000	197,900
Management...	227,200	45,900	181,300	184,500	18,500	14,000	9,100	800	212,900
Percent management...	51.7	46.2	53.4	52.2	44.0	57.2	55.2	45.5	51.8
Less than 35...	98,700	31,200	67,500	76,400	8,800	6,300	6,400	600	96,800
Other...	53,900	18,600	35,400	41,900	5,600	3,000	3,000	500	53,000
Management...	44,700	12,600	32,100	34,600	3,300	3,300	3,400	200	43,800
Percent management...	45.3	40.5	47.6	45.2	36.8	52.1	53.5	28.3	45.3
35 to 44	142,000	37,600	104,400	110,300	14,000	10,100	6,100	800	137,000
Other...	68,000	19,300	48,800	52,500	7,500	4,800	2,300	300	65,900
Management...	74,000	18,300	55,700	57,700	6,500	5,300	3,800	500	71,100
Percent management...	52.1	48.8	53.3	52.4	46.6	52.3	63.0	57.9	51.9
45 to 54	140,600	25,200	115,400	119,400	12,700	6,100	2,000	200	126,400
Other...	62,200	12,300	49,900	52,300	6,700	2,000	1,200	100	55,400
Management...	78,300	12,800	65,500	67,100	5,900	4,200	800	200	71,100
Percent management...	55.7	51.0	56.7	56.2	46.9	67.9	40.0	72.5	56.2
55 or older	57,900	5,400	52,400	47,300	6,500	2,000	2,000	200	50,500
Other...	27,700	3,300	24,300	22,200	3,700	700	900	100	23,600
Management...	30,200	2,100	28,100	25,000	2,800	1,300	1,000	-	26,900
Percent management...	52.2	38.6	53.6	53.0	43.0	65.2	52.3	15.0	53.2
									44.9

KEY: - = Fewer than 50 estimated.

NOTE: Figures are rounded to nearest hundred. Percentages are calculated from unrounded numbers. Details will not add to total because of rounding. The term "scientists and engineers" includes all persons who have ever received a bachelor's degree or higher in a science or engineering field, plus persons holding a non-science and -engineering bachelor's or higher degree who were employed in a science or engineering occupation. Total includes "other" race/ethnicity not shown separately.

SOURCE: National Science Foundation/Division of Science Resources Studies, 1997 SESTAT (Scientists and Engineers Statistical Data System).

Women, Minorities, and Persons With Disabilities in Science and Engineering: 2000

**Appendix table 5-23. Scientists and engineers employed in business or industry,
by sex, race/ethnicity, and primary or secondary work activity: 1997**

Primary or secondary work activity and sex	Total	White, non-Hispanic	Asian/ Pacific Islander	Black, non-Hispanic	Hispanic	American Indian/ Alaskan Native
Total...	2,343,600	1,955,600	247,400	68,700	65,500	6,100
Women...	460,200	369,500	53,100	22,600	13,500	1,400
Men...	1,883,400	1,586,100	194,300	46,100	52,000	4,700
Research and development						
Women...	209,300	164,100	27,700	11,100	5,700	700
Men...	1,089,900	913,300	123,000	23,600	27,700	2,200
Teaching						
Women...	21,700	19,000	700	1,300	600	100
Men...	40,300	34,500	2,500	1,800	1,500	100
Management and administration						
Women...	200,100	165,600	18,100	9,000	6,800	600
Men...	880,400	760,700	73,400	19,000	25,100	2,300
Computer applications						
Women...	210,300	159,200	32,200	11,900	6,100	800
Men...	777,300	633,900	97,400	23,700	20,300	2,100
Other						
Women...	114,000	99,800	5,900	4,100	3,700	500
Men...	329,500	288,000	22,900	7,900	9,300	1,400

KEY: - = Fewer than 50 estimated.

NOTE: Figures are rounded to nearest hundred. Details may not add to total because of rounding. Sum of primary/secondary work activity categories exceeds total because of multiple response. The term "scientists and engineers" includes all persons who have ever received a bachelor's degree or higher in a science or engineering field, plus persons holding a non-science and -engineering bachelor's or higher degree who were employed in a science or engineering occupation. Total includes "other" race/ethnicity not shown separately.

SOURCE: National Science Foundation/Division of Science Resources Studies, 1997 SESTAT (Scientists and Engineers Statistical Data System).

Appendix table 5-24. Median annual salary of full-time employed scientists and engineers, by highest degree, occupation, sex, and age: 1997

Page 1 of 2

Occupation and age	Sex	Highest degree			
		All degrees	Bachelor's	Master's	Doctorate
In dollars					
Scientists and engineers total					
All ages	Women	47,000	45,000	48,000	50,000
	Men	58,000	55,000	60,000	65,000
20-29	Women	34,500	34,500	35,000	31,000
	Men	40,000	40,000	44,000	47,000
30-39	Women	48,000	48,800	49,700	42,000
	Men	55,000	54,000	58,700	54,900
40-49	Women	52,000	51,000	51,600	54,000
	Men	62,000	60,000	65,000	65,000
50 or older	Women	50,000	49,200	50,000	58,000
	Men	67,000	62,400	68,700	73,500
Computer and mathematical scientists					
20-29	Women	40,000	40,000	45,000	41,800
	Men	45,000	44,000	50,000	47,500
30-39	Women	51,000	50,000	54,000	56,000
	Men	57,000	55,000	60,000	64,000
40-49	Women	55,000	51,400	60,000	60,000
	Men	61,000	60,000	65,500	67,800
50 or older	Women	55,000	52,500	60,000	52,300
	Men	64,000	60,000	66,000	70,000
Life and related scientists					
20-29	Women	25,000	24,700	29,000	25,000
	Men	21,000	20,000	27,000	25,000
30-39	Women	35,000	32,000	35,200	35,000
	Men	37,000	37,000	32,000	40,000
40-49	Women	47,900	45,000	42,000	53,000
	Men	52,000	42,000	49,900	61,800
50 or older	Women	45,000	37,000	42,000	60,000
	Men	60,000	48,500	52,000	72,000

See explanatory information and SOURCE at end of table.

Appendix table 5-24. Median annual salary of full-time employed scientists and engineers, by highest degree, occupation, sex, and age: 1997

Page 2 of 2

Occupation and age	Sex	Highest degree			
		All degrees	Bachelor's	Master's	Doctorate
		In dollars			
Physical and related scientists					
20-29	Women	27,600	27,000	31,000	35,000
	Men	29,000	29,000	26,000	43,000
30-39	Women	42,000	38,000	45,000	47,000
	Men	45,000	42,000	46,000	51,000
40-49	Women	52,000	45,000	52,000	58,000
	Men	59,000	52,000	59,000	69,300
50 or older	Women	50,000	46,000	52,200	61,500
	Men	69,700	60,000	60,000	78,000
Social and related scientists					
20-29	Women	25,000	23,000	29,000	30,000
	Men	22,000	21,000	28,500	39,000
30-39	Women	36,000	29,000	35,000	40,000
	Men	42,000	33,000	41,000	46,000
40-49	Women	47,000	36,000	40,000	50,000
	Men	53,400	50,000	50,000	57,000
50 or older	Women	46,500	21,000	44,000	55,000
	Men	60,000	35,000	50,000	65,000
Engineers					
20-29	Women	41,600	41,000	43,000	40,000
	Men	41,000	40,000	45,000	60,000
30-39	Women	53,700	52,000	58,000	58,900
	Men	56,000	55,000	60,000	65,000
40-49	Women	57,700	55,400	64,000	68,000
	Men	65,000	62,400	68,000	74,000
50 or older	Women	55,000	55,000	45,000	75,800
	Men	70,000	65,000	73,000	82,000

KEY: - = Fewer than 20 individuals reporting salary.

NOTE: Total includes "professional and other degrees" not shown separately. The term "scientists and engineers" includes all persons who have ever received a bachelor's degree or higher in a science or engineering field, plus persons holding a non-science and -engineering bachelor's or higher degree who were employed in a science or engineering occupation. Median salary rounded to nearest hundred dollars.

SOURCE: National Science Foundation/Division of Science Resources Studies, 1997 SESTAT (Scientists and Engineers Statistical Data System).

**Appendix table 5-25. Median annual salary of full-time employed scientists and engineers,
by highest degree, occupation, race/ethnicity, and age: 1997**

Page 1 of 2

Occupation and race/ethnicity	All degrees					Bachelor's				
	All ages	20-29	30-39	40-49	50 or older	All ages	20-29	30-39	40-49	50 or older
In dollars										
Scientists and engineers total										
White, non-Hispanic...	55,000	38,000	54,000	60,000	65,000	53,000	38,000	53,000	60,000	62,000
Asian/Pacific Islander...	55,000	37,000	48,000	50,000	56,000	50,000	40,000	51,000	55,000	56,000
Black, non-Hispanic ...	48,000	45,000	54,000	60,000	65,000	47,500	37,000	48,000	51,100	55,000
Hispanic...	50,000	37,000	50,400	55,000	62,000	49,500	35,000	50,000	55,000	60,000
American Indian/Alaskan Native...	46,000	30,000	49,000	50,000	52,700	40,000	30,000	-	-	-
Computer/mathematical scientists										
White, non-Hispanic...	56,900	42,000	55,000	60,000	62,000	55,000	42,000	54,000	59,000	60,000
Asian/Pacific Islander...	56,000	48,000	59,200	60,000	61,000	50,000	46,000	53,000	55,000	52,000
Black, non-Hispanic ...	48,000	35,000	48,000	50,000	55,000	47,000	35,000	48,000	50,000	-
Hispanic...	53,000	40,000	55,000	60,000	50,000	50,000	38,000	50,000	53,000	-
American Indian/Alaskan Native...	53,000	-	-	-	-	-	-	-	-	-
Life and related scientists										
White, non-Hispanic...	45,000	24,000	36,000	50,000	58,000	36,000	23,000	35,000	43,000	45,000
Asian/Pacific Islander...	40,000	28,000	34,000	50,000	64,000	35,000	-	-	-	-
Black, non-Hispanic ...	46,000	27,000	36,000	47,000	60,000	46,000	-	-	-	-
Hispanic...	40,000	19,000	35,000	48,000	58,500	33,000	19,000	-	-	-
American Indian/Alaskan Native...	27,000	-	38,000	27,000	-	-	-	-	-	-
Physical and related scientists										
White, non-Hispanic...	50,100	27,800	45,000	57,000	67,200	43,000	27,500	42,000	52,000	57,000
Asian/Pacific Islander...	50,000	32,000	46,000	52,000	60,000	40,000	32,000	-	-	-
Black, non-Hispanic ...	42,000	31,500	41,000	50,100	52,000	41,000	31,000	-	-	-
Hispanic...	41,300	27,000	35,800	55,000	59,000	34,000	-	-	-	-
American Indian/Alaskan Native...	49,000	-	-	-	-	-	-	-	-	-
Social and related scientists										
White, non-Hispanic...	45,000	24,000	38,000	50,000	54,000	25,000	22,500	29,000	50,000	-
Asian/Pacific Islander...	44,000	29,500	45,000	48,000	64,000	25,000	-	-	-	-
Black, non-Hispanic ...	36,700	20,400	35,000	38,000	50,000	27,500	-	-	-	-
Hispanic...	40,000	22,500	42,900	41,000	54,000	22,500	-	-	-	-
American Indian/Alaskan Native...	30,000	-	-	-	40,000	-	-	-	-	-
Engineer										
White, non-Hispanic...	60,000	41,000	56,000	65,000	70,000	56,700	40,000	55,000	62,600	65,600
Asian/Pacific Islander...	58,000	45,000	55,000	63,000	66,000	51,000	44,000	50,000	60,000	60,000
Black, non-Hispanic ...	52,000	42,000	52,000	58,600	60,000	50,000	41,000	52,000	58,000	-
Hispanic...	54,000	40,000	54,000	60,000	66,600	52,000	40,000	51,000	55,000	65,000
American Indian/Alaskan Native...	50,000	-	54,000	53,000	-	50,000	-	-	-	-

See explanatory information and SOURCE at end of table.

**Appendix table 5-25. Median annual salary of full-time employed scientists and engineers,
by highest degree, occupation, race/ethnicity, and age: 1997**

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Occupation and race/ ethnicity	Master's					Doctorate				
	All ages	20-29	30-39	40-49	50 or older	All ages	20-29	30-39	40-49	50 or older
In dollars										
Scientists and engineers total										
White, non-Hispanic...	60,000	39,000	57,000	62,000	65,000	62,800	39,000	50,000	62,400	70,300
Asian/Pacific Islander...	59,000	50,000	55,000	60,000	66,000	63,000	52,000	55,000	65,000	74,000
Black, non-Hispanic ...	48,000	36,000	48,100	48,500	57,000	55,000	-	47,000	54,000	58,000
Hispanic...	55,000	41,000	55,000	56,000	63,000	56,000	-	46,000	54,600	70,000
American Indian/Alaskan Native...	49,000	-	-	-	-	52,000	-	41,000	50,000	60,000
Computer/mathematical scientists										
White, non-Hispanic...	61,000	46,000	60,000	65,000	66,000	65,000	42,000	60,000	65,000	68,500
Asian/Pacific Islander...	60,000	53,000	60,000	63,000	66,000	65,000	50,000	64,000	70,000	70,000
Black, non-Hispanic ...	52,000	48,000	50,000	57,600	-	63,000	-	70,000	80,000	59,000
Hispanic...	60,000	48,000	63,200	-	-	55,000	-	58,900	60,000	52,500
American Indian/Alaskan Native...	-	-	-	-	-	55,000	-	-	-	-
Life and related scientists										
White, non-Hispanic...	42,000	29,000	35,000	48,000	50,000	60,000	25,000	40,000	60,000	70,000
Asian/Pacific Islander...	39,000	-	37,000	-	-	48,000	27,000	30,000	52,000	71,000
Black, non-Hispanic ...	39,000	-	-	-	-	55,000	-	39,700	50,000	65,000
Hispanic...	33,000	-	-	-	-	56,000	-	40,000	56,000	78,000
American Indian/Alaskan Native...	-	-	-	-	-	55,000	-	35,000	50,000	-
Physical and related scientists										
White, non-Hispanic...	52,000	28,000	47,000	59,000	58,000	67,000	43,000	50,000	68,000	77,000
Asian/Pacific Islander...	44,000	-	40,000	44,000	-	60,000	-	53,000	61,500	75,000
Black, non-Hispanic ...	41,000	-	-	-	-	60,000	-	47,000	60,000	78,000
Hispanic...	47,500	-	-	-	-	60,000	-	46,000	60,000	75,000
American Indian/Alaskan Native...	-	-	-	-	-	58,000	-	-	-	-
Social and related scientists										
White, non-Hispanic...	42,000	28,500	37,000	46,000	47,000	55,000	31,000	42,000	55,000	62,000
Asian/Pacific Islander...	38,000	-	-	-	-	50,000	-	48,000	48,000	68,000
Black, non-Hispanic ...	35,000	-	-	36,000	-	50,000	-	44,500	50,000	56,500
Hispanic...	45,000	-	45,000	-	-	50,000	-	45,000	46,000	59,000
American Indian/Alaskan Native...	-	-	-	-	-	49,000	-	-	-	50,000
Engineer										
White, non-Hispanic...	65,000	45,000	60,000	69,000	74,000	75,000	52,000	65,000	75,000	83,000
Asian/Pacific Islander...	60,000	45,000	55,000	63,000	70,000	70,000	65,000	64,200	72,000	81,000
Black, non-Hispanic ...	58,000	44,400	51,000	62,000	-	67,000	-	63,000	54,000	75,000
Hispanic...	58,500	43,000	57,000	65,000	75,000	66,200	-	62,000	65,000	70,000
American Indian/Alaskan Native...	-	-	-	-	-	88,000	-	-	-	-

KEY: - = Fewer than 20 individuals reporting salary.

NOTE: Total includes "professional and other degrees" and "other" race/ethnicity not shown separately. The term "scientists and engineers" includes all persons who have ever received a bachelor's degree or higher in a science or engineering field, plus persons holding a non-science and -engineering bachelor's or higher degree who were employed in a science or engineering occupation. Median salary rounded to nearest hundred dollars.

SOURCE: National Science Foundation/Division of Science Resources Studies, 1997 SESTAT (Scientists and Engineers Statistical Data System).

**Appendix table 5-26. Median annual salary of full-time employed scientists and engineers,
by occupation, age, sex, and race/ethnicity: 1997**

Occupation and age	Women					Men				
	White, non- Hispanic	Asian/ Pacific Islander	Black, non- Hispanic	Hispanic	American Indian/ Alaskan Native	White, non- Hispanic	Asian/ Pacific Islander	Black, non- Hispanic	Hispanic	American Indian/ Alaskan Native
In dollars										
Scientists and engineers total										
20-29	33,000	40,000	35,000	34,000	-	40,000	45,000	38,000	38,000	30,000
30-39	48,000	52,800	45,000	46,000	33,000	55,000	55,000	50,000	53,000	53,000
40-49	52,000	50,000	47,000	49,500	42,000	62,000	62,000	52,000	60,000	53,000
50 or older	50,000	50,000	43,000	47,000	30,000	67,000	67,000	57,000	65,000	63,000
Computer/mathematical scientists										
20-29	40,000	46,000	35,000	38,000	-	44,500	49,000	38,000	41,000	-
30-39	51,000	55,000	46,000	50,400	-	57,000	60,000	50,000	55,000	-
40-49	55,000	56,000	45,000	50,000	-	62,000	61,000	53,000	65,000	-
50 or older	56,000	55,000	45,000	-	-	65,000	65,000	55,000	58,000	-
Life and related scientists										
20-29	25,700	22,000	-	-	-	21,000	30,000	-	-	-
30-39	35,000	35,000	36,000	34,500	-	37,500	31,000	39,700	42,000	38,000
40-49	48,900	42,300	47,000	44,000	-	52,000	57,000	48,000	56,000	-
50 or older	45,000	43,000	-	-	-	60,000	70,000	60,000	58,500	-
Physical and related scientists										
20-29	27,000	32,000	-	-	-	28,000	32,000	32,000	32,000	-
30-39	42,000	45,000	41,000	41,300	-	46,000	47,000	41,000	35,000	-
40-49	52,000	45,000	-	-	-	60,000	55,000	50,000	56,000	-
50 or older	51,000	46,000	-	-	-	70,000	70,000	52,400	72,400	-
Social and related scientists										
20-29	25,000	-	-	22,500	-	23,000	-	-	-	-
30-39	35,000	44,000	35,000	40,000	-	41,500	48,000	42,000	48,300	-
40-49	48,000	38,800	38,500	43,000	-	55,000	60,000	36,000	40,000	-
50 or older	46,500	50,000	45,000	54,000	-	60,000	65,000	50,000	56,000	-
Engineers										
20-29	41,000	43,000	40,900	40,000	-	41,000	45,000	42,000	40,000	-
30-39	53,000	56,700	53,000	54,000	-	57,000	54,000	52,000	53,000	56,000
40-49	58,000	55,000	-	-	-	65,000	64,000	58,000	60,000	55,000
50 or older	55,000	58,000	-	-	-	70,000	67,000	65,000	66,600	-

KEY: - = Fewer than 20 individuals reporting salary.

NOTE: The term "scientists and engineers" includes all persons who have ever received a bachelor's degree or higher in a science or engineering field, plus persons holding a non-science and -engineering bachelor's or higher degree who were employed in a science or engineering occupation. Median salary rounded to nearest hundred dollars.

SOURCE: National Science Foundation/Division of Science Resources Studies, 1997 SESTAT (Scientists and Engineers Statistical Data System).

**Appendix table 5-27. Median annual salary of full-time employed scientists and engineers,
by highest degree, occupation, disability status, and age: 1997**

Occupation and age	Bachelor's		Master's		Doctorate	
	Persons without disabilities	Persons with disabilities	Persons without disabilities	Persons with disabilities	Persons without disabilities	Persons with disabilities
In dollars						
Scientists and engineers total						
20-29	38,000	34,200	41,000	44,000	40,000	-
30-39	52,000	50,000	56,000	50,000	50,000	54,000
40-49	59,000	58,000	62,000	57,000	62,000	62,000
50 or older	62,000	58,600	65,000	62,000	71,000	70,000
Computer/mathematical scientists						
20-29	42,000	-	50,000	-	46,000	-
30-39	54,000	50,500	60,000	58,000	62,000	55,000
40-49	57,800	60,000	64,500	61,000	66,000	60,000
50 or older	59,800	56,000	66,000	62,000	68,000	65,000
Life and related scientists						
20-29	23,000	-	29,000	-	25,000	-
30-39	35,000	-	35,000	-	38,000	37,500
40-49	43,000	-	48,000	-	60,000	57,000
50 or older	47,000	-	49,300	-	70,000	68,400
Physical and related scientists						
20-29	28,000	-	28,000	-	43,000	-
30-39	41,000	-	45,000	-	50,000	51,000
40-49	52,000	-	56,000	-	65,400	70,000
50 or older	56,500	-	60,000	55,000	77,000	73,500
Social and related scientists						
20-29	22,500	-	29,000	-	31,000	-
30-39	30,000	-	37,000	-	42,000	40,000
40-49	50,000	-	45,000	46,000	55,000	55,000
50 or older	-	-	47,000	50,000	61,500	61,000
Engineers						
20-29	40,000	42,800	45,000	-	59,000	-
30-39	55,000	52,000	60,000	49,700	65,000	64,000
40-49	62,000	60,000	68,000	64,000	73,000	80,000
50 or older	65,000	60,000	73,000	72,000	82,000	79,000

KEY: - = Fewer than 20 individuals reporting salary

NOTE: The term "scientists and engineers" includes all persons who have ever received a bachelor's degree or higher in a science or engineering field, plus persons holding a non-science and -engineering bachelor's or higher degree who were employed in a science or engineering occupation. Median salary rounded to nearest hundred dollars.

SOURCE: National Science Foundation/Division of Science Resources Studies, 1997 SESTAT (Scientists and Engineers Statistical Data System).